



# भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित  
PUBLISHED BY AUTHORITY

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नई दिल्ली, शनिवार, जुलाई 14, 1990 (आषाढ़ 23, 1912)

No. 28]

NEW DELHI, SATURDAY, JULY 14, 1990 (ASADHA 23, 1912)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह आलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

## भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएँ और नोटिस  
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Calcutta, the 30th June 1990

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Calcutta-700 020.

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पेटेंट कार्यालय

एकस्य तथा अधिकस्य

कलकत्ता, दिनांक 14 जुलाई 1990

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रवर्तित हैं :—

पेटेंट कार्यालय शाखा, टोही इस्टेट,  
तीसरा तल, लोअर परेल (पश्चिम),  
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोवा, दमन तथा दिव एवं दादरा और नगर हवेली।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,  
इकाई से.401 से 405, तीसरा तल,  
नगरपालिका बाजार भवन,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,

61, बालासाह रोड,

मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्षद्वीप, मिनिक्ॉय तथा एमिनिदिधि द्वीप।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय  
भवन 5, 6 तथा 7वां तल,  
234/4, आचार्य जगदीश बोस रोड,  
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—“पेटेंट्स”

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य घनादेश अथवा डाक आदेश या जहां उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक ड्राफ्ट अथवा बैंक द्वारा की जा सकती है।

**APPLICATION FOR PATENTS FILED AT THE HEAD  
OFFICE 234/4, ACHARYA JAGADISH BOSE ROAD,  
CALCUTTA-20.**

The dates shown in the crescent brackets are the dates claimed Under Section 135, of the Patents Act, 1970.

1st June 1990

463/Cal/90 Bimal Chandra Bhattacharyya, Parthasarathi Bhattacharyya, Satyahari Dey and Nilanjana Das. A continuous plant tissue culture system.

464/Cal/90 Hoechst Ag. A process for the preparation of water soluble Monoazo Compounds.  
[Divisional dated 10th February, 1988]

465/Cal/90 Westinghouse Electric Corporation. Improvements in or relating to method of making dimensionally reproducible compacts.

466/Cal/90 Westinghouse Electric Corporation. Methods of making high performance compacts.

467/Cal/90 Boulet D'Auria, Terlizzi Et Cie. Profiled sheathed resistive wire.

4th June 1990

468/Cal/90 Hoechst Aktiengesellschaft. Process for the preparation of aromatic sulfonyl chlorides.

469/Cal/90 Boulet D'Auria, Terlizzi Et Cie. Method of fabricating electric resistance welding sleeves and device for producing the same.

5th June 1990

470/Cal/90 Magus Limited. Satellite television communication system for audience polling and processing answers.

471/Cal/90 Dr. Chandan Mukherjee. A portable battery operated syringe pump.

472/Cal/90 RCA Licensing Corporation. Fet comparator circuitry.

473/Cal/90 Union Kogyo Kabushiki Kaisha. A driving method, electric power generating method, and cold or hot water obtaining method using refrigerant gas.

6th June 1990

474/Cal/90 American Cynamid Co. and Krause Milling Co. A method of manufacturing a bonded particulate article.  
[Divisional dated 30th October, 1986]

475/Cal/90 Murphy Food Specialities Pvt. Ltd. A box for use in storage.

476/Cal/90 The Babcock & Wilcox Co. A line build out circuit for equalizing signals from plural cables of different lengths.  
[Divisional dated 6th May, 1988]

477/Cal/90 American Cynamid Co. and Krause Milling Co. A method of manufacturing a foundry core.  
[Divisional dated 30th October, 1986]

7th June 1990

478/Cal/90 George Sidaway. A heat engine and a method of operating a heat engine.

479/Cal/90 Lanxide Technology Co. Lp. Modified ceramic structures and method of making the same.  
[Divisional dated 8th September, 1987]

480/Cal/90 (1) Lanxide Technology Co. Lp.; (2) Alcan International Ltd. A method of producing a foamed ceramic article.  
[Divisional dated 14th September, 1987]

481/Cal/90 Lanxide Technology Co. Lp. Method for producing the self-supporting ceramic body.  
[Divisional dated 9th September, 1987]

482/Cal/90 Siemens Aktiengesellschaft. Supporting framework for a control cabinet comprised of several angular profile elements having a hollow section open to one side.

8th June 1990

483/Cal/90 Chitta Ranjan Mukherjee. Water motor cycle.

484/Cal/90 Allsop, Inc. Combination beam seat support.

APPLICATION FOR PATENTS FILED AT THE PATENT  
OFFICE BRANCH, MUNICIPAL MARKET BUILDING,  
IIIrd FLOOR, KAROL BAGH, NEW DELHI-5.

14th May 1990

452/Del/90 Oystein Vennesland, "Process for rehabilitating internally reinforced concrete by removal of chlorides".  
(Conventional date 7th July, 89 and 6th September, 1990) (Canada)

453/Del/90 John B. Miller, "Methods for electrochemical treatment of porous building materials, particularly for drying and Re-alkalization".  
(Conventional date 7th July, 89 and 6th September, 1989) (Canada)

454/Del/90 The Procter & Gamble Co. "Pressure-sensitive adhesive fastener and method of making same."

455/Del/90 UOP, "Side-to-side FCC stripping apparatus with baffle-skirts having stripping gas injection ports."

456/Del/90 The Goodyear Tyre & Rubber Co., "A process for preparing a bloom resistant vulcanizate".  
[Divisional date 11th June, 1987]

457/Del/90 Vall Reefs Exploration and Mining Co. Ltd., "Mobile slope support apparatus".

458/Del/90 Chemical Research & Licensing Co. "Distillation column reactor".

459/Del/90 Samuel Jones & Co. Ltd, "Adhesive coated label laminates."  
(Convention date 6th June, 1989) (U.K.)

15th May 1990

460/Del/90 Polymeters Response International Ltd. "Electricity meter tamper monitor".

461/Del/90 Mitsuba Electric Mfg. Co. Ltd, "Method of forming shaped configuration at end of long element".

462/Del/90 Mitsuba Electric Mfg. Co. Ltd, "Cold-forged shaft, method and apparatus for manufacturing the same."

463/Del/90 Samuel Jones & Co. Ltd, "Method and apparatus for forming score lines on sheet material".  
(Convention date 13th June, 1989) (U.K.)

464/Del/90 Imax Systems Corporation, "Camera and method of producing and displaying A 3-D motion picture".

465/Del/90 Sun Industrial Coatings Pvt. Ltd, "Plating system".  
(Convention date 19th May, 1989) (U.K.)

16th May 1990

466/Del/90 National Council for Cement & Building Materials, "A process and system for causing a separation of the fines from the coarser tailings."

467/Del/90 G.D. Agarwal, "A valve for shunting of biological fluids."

468/Del/90 Ran Bir Singh, "An anchor element for use in earth constructional applications."

469/Del/90 Heinrich Quante Berg-Und Ingenieur-Technik GMBH & Co. KG, "Construction support element".

470/Del/90 Htchiner Manufacturing Co. Inc, "Countergravity casting apparatus and method with magnetically actuated valve to prevent molten metal run-out".

471/Del/90 Exxon Chemical Patents, Inc, "Dynamically vulcanized alloys having two copolymers in the crosslinked phase and a crystalline matrix".

16th May 1990

472/Del/90 Margrit Dialich, "A arrangement for the connection of a new cast strip in a continuous casting operation".

17th May 1990

473/Del/90 Shell Internationale Research Maatschappij B.V., "Viscosity modification of mineral oils".  
(Convention date 19th May, 1989) (U.K.)

18th May 1990

474/Del/90 Linemann Halflo India Ltd., "An air blaster."

475/Del/90 Ranjana Gupta, "A process".

476/Del/90 Ranjana Gupta, "A process".

477/Del/90 National Council for Cement & Building Materials, "A process and system for causing a separation of the fines from the coarser particles".  
[Divisional date 17th November, 1988]

478/Del/90 National Council for Cement & Building, "A process and system for causing a separation of the fines from the coarser particles".  
[Divisional date 17th November, 1988]

479/Del/90 National Council for Cement & Building Materials, "A separatora."  
[Divisional date 17th November, 1988]

480/Del/90 Council of Scientific & Industrial Research "A process for the oxidation of saturated hydrocarbons".  
[Divisional date 21st January 1989]

481/Del/90 Target Rock Corporation, "Programmable pressure reducing apparatus for throttling fluids under high pressure."

482/Del/90 The B.F. Goodrich Co, "Reactor vessel".

483/Del/90 Fenrir AG, "Method and device for producing endless drive belts."

484/Del/90 Nissaei ASB Machine Co. Ltd. "Blow mold".

485/Del/90 BWE Ltd. "Continuous extrusion apparatus".  
(Convention date 18th May, 89 & 20th June, 1989) (U.K.)

486/Del/90 Samuel Jones & Co. Ltd. "Method and apparatus for forming scored lines on sheet materials".  
(Convention date 13th June, 1989 & 4th October, 89) (U.K.)

#### 21st May 1990

487/Del/90 Dr. Rajesh Nagar, "A process for the preparation of novel pharmacological active metal complexes of N-substituted benzamide-2-carboxylic acid".

488/Del/90 The Procter & Gamble Co., "Novel chelating agents and detergent and cleaning compositions containing them".

489/Del/90 Mangel Singh, "Fuel-less turbine pump-cum-machine".

490/Del/90 Paul Wurth S.A. Device for coupling a rod for drilling the tap-hole of a shaft furnace to the working tool of a drilling machine".

491/Del/90 Alcan International Ltd. "Improvements in apparatus for particle determination in liquid metals".

492/Del/90 Balcke-Durr Aktiengesellschaft, "Receptacle provided with a plurality of pipe branch pieces".

#### 22nd May 1990

493/Del/90 Council of Scientific & Industrial Research, "A process for cathodic deposition of a resin over metal sheets".  
[Divisional date 11th October, 1988]

494/Del/90 E.R. Squibb & Sons, Inc, "Pyranil cyanoguanidine derivatives".

#### 23rd May 1990

495/Del/90 Kul Bhushan Lall Wadhwa, "A flushing system".  
[Divisional date 5th May, 1989]

496/Del/90 Texas Petrochemicals Corporation, "Oxidative dehydrogenation of amylenes".

497/Del/90 Imperial Chemicals Industries, PLC, "Electrostatic spray process and apparatus".  
(Convention date 23rd June 1989) (U.K.)

498/Del/90 Telemecanique, "Quick closure box".

#### 24th May 1990

499/Del/90 Council of Scientific & Industrial Research, "A composition useful for enhancing and controlling the flowering in bamboo species".

500/Del/90 Hindustan Compressors Pvt. Ltd., "Water cooled air compressors".

501/Del/90 The Procter & Gamble Co., "Process for making alkyl ethoxy carboxylates".

502/Del/90 The Procter & Gamble Co., "Light duty liquid dish-washing detergent composition containing an alkyl ethoxy carboxylate surfactant".

503/Del/90 Alcan International Ltd. "Refractory linings capable of resisting sodium and sodium salts".  
(Convention date 25th May, 1989) (Canada)

504/Del/90 Sony Corporation, "Unified compact video camera and VCR".

#### 25th May 1990

505/Del/90 GEC Alsthom S.A., "A medium tension circuit breaking having high nominal current".

506/Del/90 France Galva Lorraine, "Electro-magnetic valve for controlling the flow of a fluid in a pipe".

507/Del/90 Imperial Chemical Industries PLC, "3-hydroxybutyrate polymer composition".  
(Convention date 30th May, 89) (U.K.)

508/Del/90 The Secretary of State for Defence in Her Britannic Majesty's Government of the United Kingdom of Great Britain and Northern Ireland, "Polymerisation of cyclic, ethers capable of undergoing cationic oxonium ion ring-opening polymerisation".  
(Convention date 31st May 1989) (U.K.)

#### APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH AT TODI ESTATES, IIIRD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-400 013.

#### 30th April 1990

93/Bom/90 Mulchand Shamji Chheda, Prabhavati Ganji Chheda, Kishore Shamji Chheda & Tarla Jayanti Chheda. Collapsible crate.

#### 2nd May 1990

94/Bom/90 Bharat Chandrasekhar Vatsaraj. Ejection of patterns from die cavity on an injection press.

95/Bom/90 Steelage Industries Ltd. A lock arrangement commonly known as night latch.

96/Bom/90 Hemant Madhukar Ranadive. Unidirectional Power Transmitting coupling assembly.

#### 4th May 1990

97/Bom/90 Ashok Sadashiv Kalkar. Electrical Heater/Vapouriser for Electronic Mosquito Repellent Appliance.

98/Bom/90 Gajanan Virthal Sathaya. Float operated tracking system for solar device to accomplish pre-determinedly uniform rate of rotation of the system within given tolerance with the help of non-uniform transverse of the float accomplished by controlling liquid level in the float tank.

99/Bom/90 Alok Tewari. Educational Toys.

100/Bom/90 Alok Tewari. Educational Toys.

101/Bom/90 Alok Tewari. Educational Toys.

7th May 1990

102/Bom/90 Bhupat Labhshanker Pandya. & Venkatesh N. Prabhu. Electronic kerosene gas stove.

103/Bom/90 Hindustan Lever Ltd. Compositions.

104/Bom/90 Ravindra Parvatrao Wagh. A process for recovering bio-gas and fertilizer from sugar factory and or distillery effluents.

8th May 1990

105/Bom/90 Hindustan Lever Ltd., 10-5-89, Gr. Britain. Bleach activation and bleaching composition.

10th May 1990

106/Bom/90 Arun Hari Kulkarni. Continuous length varnished sleeve with stable inner diameter and process/plant to manufacture the same.

107/Bom/90 Rattan Lal Sud. The process of manufacturing a multi-layered plastic wall container and a multi layered wall container.

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002.

14th May 1990

362/Mas/90 Ambana Cement Products. An Improved R.C.C. 4-way standpost.

363/Mas/90 M/s. Natural Energy Processing Co. An improved wind energy converter.

364/Mas/90 Zellweger Uster AG. Device for monitoring and/or measuring parameters of a running thread-like or wire-like test material and method for operating the device.

365/Mas/90 Union Carbide Chemicals and Plastics Company Inc. Process for producing acrylic ester.

366/Mas/90 Ralph Mullenberg. Clamping arrangement or clamping assembly for the frictional clamping of an outer component on an inner component.

367/Mas/90 Institute De Recherches De La Siderurgie Francaise "IRSID". Device for continuously casting liquid metal between two rolls.

15th May 1990

368/Mas/90 TI Diamond Chain Limited. An improved transmission chain.

369/Mas/90 TI Diamond Chain Limited. An improved timing chain.

370/Mas/90 Maschinenfabrik Rieter AG. Carding element.

371/Mas/90 Asea Brown Boveri Ltd. Combustion chamber of a gas turbine.

372/Mas/90 Akzo nv. Yarn formed from core-sheath filaments and production thereof.

373/Mas/90 Raychem Corporation. Apparatus and method for the reduction of polyolefin insulation cracking of cables.

16th May 1990

374/Mas/90 Sundarsa Kunchithapadam. Manually operable tiller for wet land.

375/Mas/90 Concertainer Ltd. Collapsible container apparatus for use in the storage and transportation of fluid material. (July 7, 1989; United Kingdom)

376/Mas/90 Minnesota Mining and Manufacturing Company. Non nesting component carrier tape.

377/Mas/90 Michael Cohen. Compositions and methods of effecting contraception.

378/Mas/90 Takeda Chemical Industries, Ltd., Process for preparing UN—unsaturated amine and an insecticidal/miticidal composition. (Divisional to Patel No. 493/Mas/88).

379/Mas/90 Institut De Recherches De La Siderurgie Francaise (IRSID en abrege). Device for supplying molten metal to an installation for the continuous casting of thin products and method for the implementation thereof.

17th May 1990

380/Mas/90 Merlin Gerin. Digital isolation monitor for an electrical power system.

381/Mas/90 Merlin Gerin. Correction procedure of the phase difference introduced by a zero sequence measurement toroid of a leakage current and isolation monitor implementing this procedure.

382/Mas/90 Gullick Dobson Limited. Mine Roof Supports. (May 18, 1989; United Kingdom).

383/Mas/90 GEC-Marconi Limited. A printed wiring board mounting assembly. (May 31, 1989; United Kingdom).

18th May 1990

384/Mas/90 E. Krishnan. Producing shirts (Jubbas) with pockets and without collars maxis, midies and top, kammies etc. by wearing in handloom itself.

385/Mas/90 N. Moorthy. Water taping regulator.

386/Mas/90 N. Moorthy. Safety valve.

387/Mas/90 Architect. Syed Yakub Syed Yahya. An instrument for ablution (washing private parts of human body) for western water closet.

388/Mas/90 Chevron Research & Technology Company. "Zeolite SSZ-33".

389/Mas/90 Minnesota Mining and Manufacturing Company. Microsphere-based retroreflective articles with enhanced retroreflective brightness.

390/Mas/90 Sun Chemical Corporation. A process for preparing a substrate combined with a polymer composition suitable for using as a binder of fibers or fabrics. (Divisional to Patent Application No. 515/Mas/86).

391/Mas/90 Institut National De La Recherche Agronomique (INRA); Institut Pasteur & Commissariat A L'Energie Atomique (GEA). DNA Molecular probes specific of the male genome of ruminants, particularly of the sub-family of the bovines. (Divisional to Patent Application No. 609/Mas/88).

## 21st May 1990

- 392/Mas/90 B.A. Joseph. Mod spindle.
- 393/Mas/90 Martin Engineering Company. Constant angle conveyor belt cleaner.
- 394/Mas/90 Charbonnages De France (Establishment public). A device for extracting particulate material of a fluidized bed from the fluidization enclosure.
- 395/Mas/90 Fila Sport S P A. Sports shoe incorporating an elastic insert in the heel.

## 22nd May 1990

- 396/Mas/90 Mrs. Devika Manoharan. "All insone"—Singaram No. 1 & 2.
- 397/Mas/90 Hoogovens Groep. BV. Channel structure for flow of molten pig iron.
- 398/Mas/90 Aardvark Pty Ltd. Internal combustion engine. (June 7, 1989; Australia).
- 399/Mas/90 Pont-a-Mousson S. A. Compressible sealing ring and pipe joint formed therewith.
- 400/Mas/90 Merlin Gerin. Rotating ARC electrical switch.
- 401/Mas/90 Brillcut Patentanstalt. A device for examining gemstones for bruting. (April 14, 1986; Great Britain) (Divisional to Patent Application No. 275/Mas/87)

## 23rd May 1990

- 402/Mas/90 Minnesota Mining and Manufacturing Company. Sheet Dispenser.
- 403/Mas/90 Marangone RTS S. p. A. Improved tread assembly for retreading motor vehicle tires and mold for making the same.

## 24th May 1990

- 404/Mas/90 SMS Schloemann-Siemag Aktiengesellschaft. Pouring tube for feeding molten steel into a continuous casting mold.
- 405/Mas/90 Schubert & Salzer Maschinenfabrik AG. A method and a device for piecing on an Open-end spinning device.
- 406/Mas/90 B. R. Srinivas. A braking system for two wheelers.

## The 25th May, 1990

- 407/Mas/90 Tiny Top Appliances Private Limited. A novel automatic water pressure system.
- 408/Mas/90 Parthasarathy Ranganathan Vijaya Raghavan. A multipurpose steam cooking plant.
- 409/Mas/90 Floats India whose partners are John Fernandez Salvadore and Shunmugam Ganesh. Improvements in or relating to floats for carburetors.
- 410/Mas/90 SAZ Sommer Aluminium Zug AG. Method of reconditioning foundry sand.
- 411/Mas/90 Chevron Research & Technology Company. Catalyst system and process for hydrotreating hydrocarbons.
- 412/Mas/90 Stern & Leonard Associates. Selfpositioning belt tensioner.

- 413/Mas/90 Mobil Oil Corporation. Composition of synthetic porous crystalline material, its synthesis and use.

- 414/Mas/90 Institut Francais Du Petrole and Collexip. Flexible pipe comprising an aluminium alloy matrix composite material and method of manufacturing said material.

## The 28th May, 1990

- 415/Mas/90 Merlin Gerin. Sealed switchgear cabinet.
- 416/Mas/90 Sedepro. Volumetric pump and process for volumetric pumping.
- 417/Mas/90 Mitsui Petrochemical Industries Ltd. Method and apparatus for burning combustible solid residue from chemical plant.
- 418/Mas/90 Nippon Chemipharm co. Ltd. A process for the preparation of an alkylendiamine derivative. (Divisional to Patent Application No. 657/Mas/88).

## The 29th May, 1990

- 419/Mas/90 Pont-A-Mousson S.A. Casket with an annular anchoring heel.
- 420/Mas/90 Pont-A-Mousson S.A. Casket for leaktight locked joint.
- 421/Mas/90 Hylsa, Sade C.V. Method for the transport of sponge iron.
- 422/Mas/90 Affymax Technologies N.V. Very large scale immobilized polymer synthesis.
- 423/Mas/90 Horst Bockemuehl-Wuelenweber. A transport belt for yarns.
- 424/Mas/90 Didier Ofu Engineering GmbH; Krupp Koppers GmbH and Still Otto GmbH. Heating System for regenerative coking ovens.
- 425/Mas/90 Zellweger Uster AG. Apparatus for determining strength properties of long, textile test material.

## The 30th May, 1990

- 426/Mas/90 State of Israel. A method for making a pharmaceutical composition. (Divisional to Patent Application No. 695/Mas/88).
- 427/Mas/90 Firma Recytec SA. Method for testing the radioactivity of object containing metal or concrete.

## The 31st May, 1990

- 428/Mas/90 Low Heat Driers Pvt. Ltd. A device for the smoke drying of agricultural products.

## The 1st June, 1990

- 429/Mas/90 D.L.T. MFG Corp. Staple removing device.
- 430/Mas/90 Maschinenfabrik Rieter AG. Flock extraction apparatus. (Divisional to Patent Application No. 557/Mas/86).
- 431/Mas/90 Maschinenfabrik Rieter AG. Flock delivery systems. (October 2, 1985; Great Britain). (Divisional to Patent Application No. 557/Mas/86).
- 432/Mas/90 Barnea, Austen Bernard, Austen Barnea Advanced Technology Inc. Axial Locking Device. (June 2, 1989; United Kingdom).

433/Maa/90 Cabot Corporation. Carbon black process control system.

CAL—13.  
MAS—13.  
DEL—11.  
BOM— 8.

#### ALTERATION

166719  
(349/CaI/88) Anti-dated February 1, 1985.

166730  
(127/Del/87) Anti-dated October 16, 1984.

166755  
(1056/Del/85) Anti-dated March 5, 1982.

166779  
(707/Del/86) Anti-dated January 6, 1984.

#### OPPOSITION PROCEEDINGS

The application for Patent No. 151345 (421/Del/79) made by M/s. New Metal Foundries in respect of which opposition was entered by the M/s. The Associated Cement Companies Ltd., as notified in the Gazette of India, Part III, Section 2 dated 22nd October, 1983 has been treated as withdrawn and no patent shall be sealed thereon.

#### CLAIM UNDER SECTION 20(1) OF THE PATENTS ACT, 1970

(1)

Claim made by the O & K Orenstein & Koppel A.G. under Section 20(1) of the Patents Act, 1970, to proceed the application for Patent No. 165682 in their name has been allowed.

(2)

Claim made by Seabed Scour Control Systems Limited under Section 20(1) of the Patents Act, 1970, to proceed the application for Patent No. 164259 in their name has been allowed.

(3)

Claim made by O & K Orenstein & Koppel AG under Section 20(1) of the Patents Act, 1970, to proceed the application for Patent No. 165473 in their name has been allowed.

(4)

Claim made by O & K Orenstein & Koppel A.G. under Section 20(1) of the Patents Act, 1970, to proceed the application for Patent No. 166065 in their name has been allowed.

(5)

Claim made by Seabed Scour Control Systems Limited under Section 20 (1) of the Patents Act, 1970, to proceed the application for Patent No. 163404 in their name has been allowed.

#### PATENT SEALED

159532	164750	165218	165396	165400	165401	165433
165464	165470	165471	165492	165494	165495	165496
165498	165500	165508	165509	165510	165511	165512
165514	165521	165529	165530	165532	165550	165557
165559	165560	165562	165563	165566	165568	165576
165577	165579	165588	165591	165592	165593	165595
165597	165598	165599				

#### AMENDMENT PROCEEDING UNDER SECTION 57

(1)

The amendments proposed by the LUBRIZOL CORPORATION in respect of application for Patent No. 163405 as advertised in Part III Section 2 of the Gazette of India dated the 17th February, 1990 have been allowed.

(2)

The amendment proposed by ATUL PRODUCTS LIMITED at Ashoka Chambers, Rasala Marg, Mithakhali Cross Roads, Ellisbridge, Ahmedabad 380006, Gujarat, India, in respect of Patent Application No. 163247 (217/Bom/1989), as advertised in Part III, Section 2 of the Gazette of India dated 9-9-1989 has been allowed.

(3)

The amendments proposed by The Associated Cement Companies Limited, Bombay-20 in respect of Patent No. 164936 as advertised in Part III, Section 2 of the Gazette of India dated 18th November, 1989 has been allowed.

(4)

The amendments proposed by GODREJ SOAPES LIMITED of Pirojshanagar, Eastern Express Highway, Vikhroli, Bombay-400079, Maharashtra, India, in respect of Patent Application No. 158206 as advertised in Part III, Section 2 of the Gazette of India dated 12th August, 1989 have been allowed.

(5)

The amendments proposed by ATUL PRODUCTS LIMITED at Ashoka Chambers, Rasala Marg, Mithakhali Cross Road, Ellisbridge, Ahmedabad-380006, Gujarat, India, in respect of Patent Application No. 163246 (216/Bom/1985) as advertised in Part III, Section 2 of the Gazette of India dated 9th September, 1989 have been allowed.

(6)

Notice is hereby given that M/s ICI INDIA LIMITED, an Indian Company having its registered office, ICI House 34, Chowringhee Road, Calcutta-700 071, West Bengal, India, have made an application under Section 57 of the Patents Act, 1970 for amendment by way of altering the name of applicant for Patent/complete specification for Patent No. 165391 (275/Bom/1986), for "A process for catalytic transfer hydrogenation of aliphatic or aromatic nitrocompounds to corresponding amines, particularly 4-nitrodiphenyl-amine to 4-Aminodiphenylamine". The application for amendment & proposed amendments can be inspected free of charge at the Patent Office Branch, Toddi Estates, 3rd Floor, Sun Mill Compound, Lower Parel (West), Bombay-400 013 on any working day during the usual office hours or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendments may file the notice of opposition on the prescribed Form 36 along with full written statement within three months from the date of this notification at the Patent Office, Branch, Bombay.

If full written statement of opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice of opposition.

## RENEWAL FEES PAID

146694	146818	146888	147167	147270	147306	148868
148925	149288	149756	149941	150012	150013	150116
150249	150293	150450	150492	150696	150991	151140
151178	151272	151273	151394	151423	151725	151872
151949	152350	152607	152652	152765	152777	152836
152895	152978	153020	153021	153443	153472	153645
153655	153798	153964	153992	154144	154216	154267
154361	154431	154437	154438	154441	154624	154628
154642	154663	154746	154833	154897	155073	155099
155188	155413	155415	155985	155987	156185	156238
156281	156433	156512	156611	156755	156898	156926
156927	156939	157133	157134	157135	157137	157142
157208	157274	157353	157419	157420	157625	157765
157774	157879	157937	157980	157986	158072	158401
158602	158641	158665	158680	158683	158700	158725
158751	158761	158784	158785	158786	158830	158833
159483	159492	159632	159725	159782	159789	159919
159966	159977	159983	160082	160242	160246	160251
160321	160350	160367	160413	160482	160595	160613
160633	160645	160863	160864	160900	160912	160925
161010	161112	161181	161347	161351	161400	161462
161678	161741	162005	162040	162078	162171	162185
162189	162201	162314	162369	162381	162385	162411
162414	162466	162487	162520	162554	162589	162591
162599	162794	162817	162847	163065	163094	163095
163116	163132	163439	163451	163534	163572	163577
163593	163600	163631	163699	163722	163935	163959
164066	164091	164118	164119	164250	164251	164368
164372	164395	164400	164426	164513	164554	164558
164624	164630	164675	164680	164719	164795	164828
164861	164877	164878	164888	164923	164938	164939
165002	165003	165007	165069	165203	165207	165247
165285	165317	165321	165328	165329	165333	165334
165375	165378	165381	165383	165388	165411	165412
165413	165414	165415	165419	165425	165426	165428
165430	165434	165442	165443	165452	165455	165460
165461	165462	165475	165477	165478	165479	165480
165964.						

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classifications given below in respect of each specification are according to Indian Classification and International Classification."

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book

Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कमी भी नियंत्रक, एकस्व को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप है।"

नीचे सूचीगत विनिर्देशों की सीमित संख्यक में मुद्रित प्रतियाँ, भारत सरकार बुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या सलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रमार उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरान्त उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रमार 4/- रु० है) फोटो लिप्यान्तरण प्रमार का परिकलन किया जा सकता है।



Ind. Cl. : 136 E.

166711

Rules, 1972), Patent Office, Calcutta.

Int. Class. : B 29 D, 23/00.

8 Claims

**A TOOL FOR MANUFACTURING PIPES WITH VARYING WALL THICKNESSES.**

Applicant : CINCINNATI MILACRON INC. 4701 MARBURG AVENUE, CINCINNATI, OHIO 45209. U.S.A.

Inventor: JOSEF DOBROWSKY.

Application No. : 817/Cal/1987 filed October 20, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents

A tool for manufacturing pipes with varying wall thicknesses, consisting of a tube head, a nozzle, an arbor situated in the tube head and nozzle as well as an adjusting mechanism for executing relative shifts between the arbor and nozzle, characterized by the fact that the nozzle (2) is connected to the adjusting mechanism (4) for shifting in the axial direction of the tool (1) and exhibits a trumpet-shaped throat (21) in the direction from the tube head to the free end face as well as that the arbor (3) also exhibits a trumpet-shaped arbor diminution (23) in the area of this nozzle throat (21).

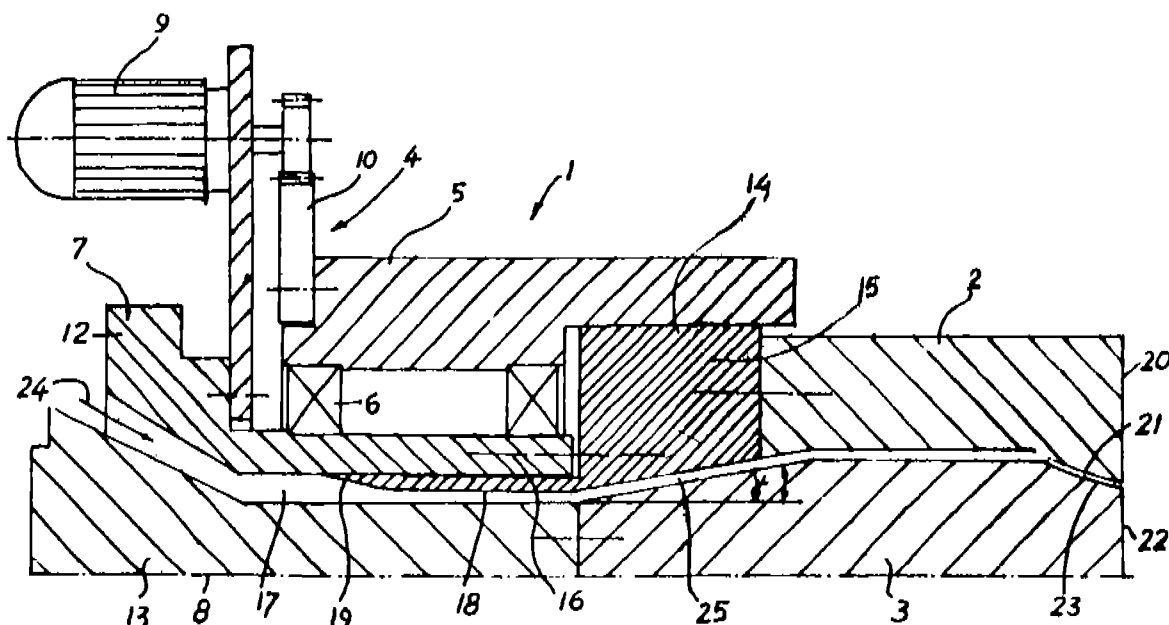


Fig. 1

Compl. Specn. 14 Pages.

Drgs. 2 sheets.

CLASS : 64. B1

166712

Int. Cl. : H 01 R, 13/00

**"CABLE CONNECTING ELEMENT, IN PARTICULAR DROPWIRE CABLES".**

Applicant : KRONE AKTIENGESELLSCHAFT, OF BEES-KOWDAMM 3—11, D-1000 BERLIN 37. W. GERMANY.

Inventors : (1) HEIDE TEICHLER, (2) WOLFGANG RADELOW.

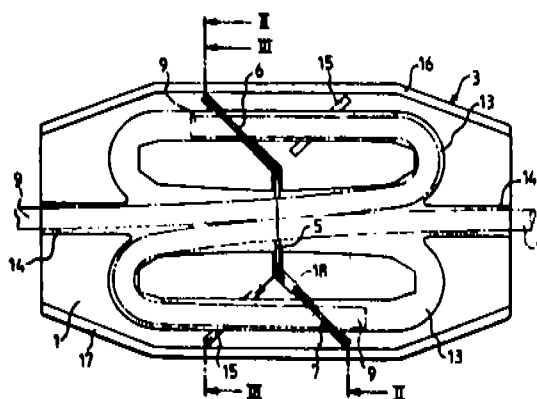
Application No. : 862/Cal/1987 filed November 3, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

6 Claims

Cable connecting element, particularly dropwire cable connecting element for doublewire dropwire cables, consisting of an upper and a lower part and of two connecting elements with two cutting/clamping contacts each. Characterized by that in the upper and lower parts (2, 2a, or 3, 3a, resp.), guide channels (13, 13a) each are provided for accommodation of the double-wire dropwire cables (9, 9a) with their narrow sides (19), and that one connecting element (4, 4a) each

with its cutting/clamping contacts (6, 6a; 7, 7a) is disposed in the guide channels (13, 13a) of upper and lower part (2, 2a or 3, 3a, resp.) said contacts each penetrating laterally into the narrow sides (19) of the incoming and outgoing double-wire dropwire cables (9, 9a) and contacting electrically their wires (11, 12).



Compl. Specn. 12 Pages.

Drgs. 2 sheets

Int. Cl.: C 06 C, 7/00.

166713

**NON-ELECTRIC DETONATORS WITHOUT A PERCUSSION ELEMENT.**

Applicant: E. I. DU PONT DE NEMOURS AND COMPANY,  
AT WILMINGTON, DELAWARE, UNITED STATES OF  
AMERICA.

Inventor: MALAK ELIAS YUNAN.

Application No.: 897/Cal/1987, filed on November 13, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

**20 Claims**

A non-electric detonator comprising a tubular shell closed at its  
bottom end and containing:

- (a) at least one base charge of a detonating explosive composition positioned in the bottom of the shell,
- (b) a priming charge of a heat sensitive detonating explosive composition adjacent to the base charge that does not fill the shell,
- (c) a rupturable membrane that seals the top end of the shell and forms an open space between the priming charge and the top end of the tubular shell, and
- (d) means for holding low energy detonating cord (LEDC) positioned in abutting relationship to the membrane;

whereby on detonation of the LEDC the membrane is ruptured and the priming charge is initiated which in turn initiates the detonating explosive.

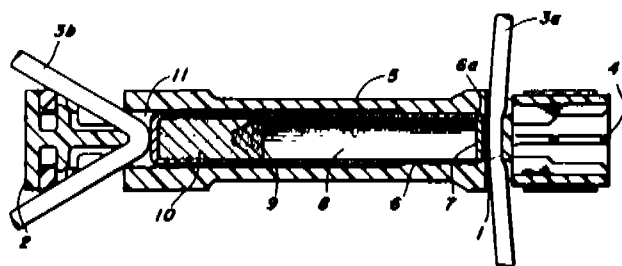


Fig. 2

Compl. Specn. 20 Pages.

Drgs. 6 sheets.

CLASS: 190. D.

166714

Int. Cl.: F 03 D 3/00.

**"A WIND TURBINE".**

Applicant: PETER JANSSON OF 33 PENKIVIL STREET,  
WILLOUGHBY, NEW SOUTH WALES, 2068, COMMON-  
WEALTH OF AUSTRALIA.

Inventor: PETER JANSSON.

Application No.: 929/Cal/1987 filed November 26, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

**13 Claims**

A wind turbine comprising a vaned rotor, rotatable about a vertical axis, each vane of said rotor being formed with an elongate concave trailing face; Wind deflection means being provided and including or forming a venturi, such that wind is gathered and directed into and through said venturi, against a concave, trailing face of at least one vane on one side of said rotor, said vane being adjacent to and rotating away from said venturi.

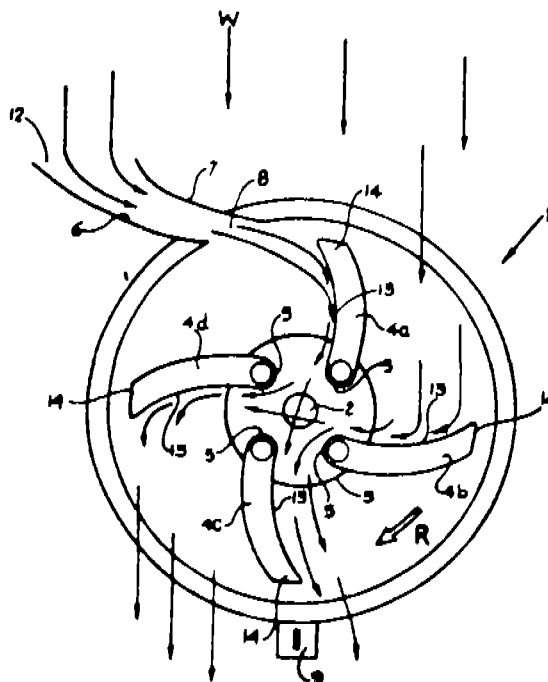


Fig. 1

Compl. Specn. 14 Pages.

Drgs. 4 sheets

Int. Cl.: F 23 B, 1/32.

166715

**FEEDING ARRANGEMENT FOR ROTARY COMBUSTOR.**

Applicant: WESTINGHOUSE ELECTRIC CORPORATION,  
OF WESTINGHOUSE BUILDING, GATEWAY CENTER,  
PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF  
AMERICA.

Inventors: 1. JOHN THOMAS HEALY, 2. JOEL W.  
JOHNSON.

Application No.: 957/Cal/1987 filed December 7, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents  
Rules, 1972), Patent Office, Calcutta.

**5 Claims**

A feeding arrangement for a rotary combustor having an open end for receiving combustible material (9), a wall (41) closing said open end of said rotary combustor (10) and defining a doorway (42), a generally vertical chute (33) including said wall (41), leading to said doorway (42) and having a lower floor (34) aligned with the bottom of

the doorway (42), a ram (44) mounted for reciprocation over said lower floor (34) and into and through said doorway (42) and a device (52) for reciprocating said ram (44) characterized by a door (43) mounted to normally close said doorway (42), said door (43) being movable to open the doorway (42) when pushed by said ram (44) and combustible material (9) and being biased toward a closed position, whereby said ram (44) device (52) for reciprocating said ram (44) and said biased door (43) cooperate to positively push material (9) into and through said doorway (42) by only operating said ram (44).

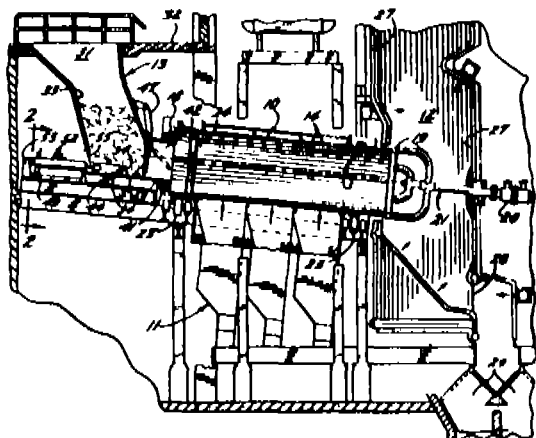


Fig. 1

Compl. Specn. 9 Claims.

Drgs. 2 sheets

CLASS : 66 C<sub>1</sub>

166716

Int. Cl. : C 09 B, 67/24, 67/38, D 06 P 1/52.

#### FOAM COMPOSITION FOR PRINTING AND DYEING OF TEXTILE MATERIALS.

Applicant : VSESOJUZNY NAUCHNO-ISSLEDOVATELSKY I EXPERIMENTALNY INSTITUT PO PERERABOTKE KHIMICHESKIKH VOLOKON, OF ULITS A TIMURA FRUNZE, 11, MOSCOW, USSR.

Inventors : (1) ALEXANDRA FEDOROVNA DAVYDOVA, (2) ALEXANDR VADIMOVICH LADNOV.

Application No. : 117/Cal/1988 filed February 10, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 1 Claim

A foam composition for printing and dyeing of textile materials from natural and man-made yarns comprising a dyestuff as referred to in the specification, a copolymer of an alkylacrylate with 2-10 carbon atoms in the alkyl with an alkylmethacrylate having 1-10 carbon atoms in the alkyl and with acrylic acid at a molar ratio therebetween of 40.0—62.5 : 12.0—34.2 : 22.0—27.5 respectively, with a molecular mass of 30,000 to 60,000 neutralized with ammonia; urea, sodium bicarbonate or ammonium sulphate, a polyphenylethoxysiloxane of

the general formula shown in Fig. 1 of the accompanying drawings,

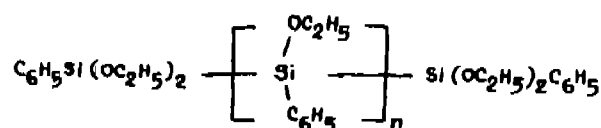


Fig. 1

Wherein n=1 to 10,

and water, at the following proportions of the components, per cent by mass :

dyestuff	7.0—10.0
copolymer of an alkylacrylate with an alkylmethacrylate and acrylic acid neutralized with ammonia	3.0—12.0
urea	5.0—10.0
sodium bicarbonate or ammonium sulphate	0.2— 1.5
polyphenylethoxysiloxane	0.1— 0.05
water	the balance.

Compl. Specn. 39 Pages.

Drg. 1 sheet

CLASS : 185 C & D<sub>2</sub>.

166717

Int. Cl. : A 23 F, 3/00, 3/06, 3/12.

#### "IMPROVED CTC MACHINE".

Applicant : TRADE & INDUSTRY PRIVATE LIMITED, AT 19, R. N. MUKHERJEE ROAD, CALCUTTA-700 001, WEST BENGAL, INDIA.

Inventors : (1) OM PRAKASH BAGARIA, (2) OLAKANGIL JOSEPH JOHNNY.

Application No. : 175/Cal/1988 filed February 29, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 6 Claims

An improved CTC machine, characterised in that the rollers of each of the units of the CTC machine are housed in air chambers, said air chambers defining air circulation zones in and around the rollers, and that the said air chambers are in communication either with a common source of humidified/chilled air, through a common manifold and channelised lines, or with individual sources of humidified/chilled air.

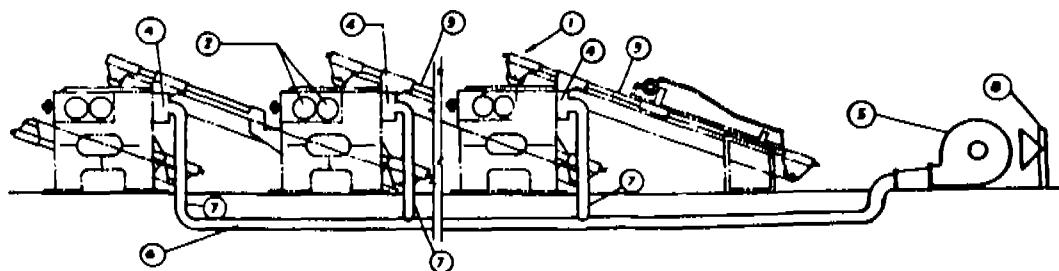


Fig. 1

Compl. Specn. 8 Pages.  
CLASS : 77 C.

166718

15 Claims

Drg. 1 Sheet

Int. Cl. : C 11 B, 13/00.

**"PROCESS FOR EXTRACTING FATTY OIL FROM OIL-BEARING RAW ANIMAL MATERIAL"**

Applicant : INSTITUT PRIKLADNOI FIZIKI AKADEMII NAUK MOLDAVSKOI SSR, OF ULITS A GROSULA, 5, KISHINEV, USSR.

Inventors : (1) SEMEN EVPATIEVICH BEROZOL, (2) MIRCHA KIRILLOVICH, BOLOGA, (3) ANATOLY ALEXANDROVICH SKIMBOV, (4) JURY NIKOLAEVICH PAUKOV, (5) ANATOLY VASILIEVICH ZAKHARCHUK, (6) NIKOLAI ILICH LUKYANOV.

Application No. : 299/Cal/1988, filed on April 12, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

**6 Claims**

A process for extracting fatty oil from oil-bearing raw animal material, comprising comminuting the raw material, characterised by moistening the comminuted raw material by adding from 20 to 40% of water by mass of the raw material, treating said moistened material with electric current with a field intensity ranging from 25 to 100 V/cm, thereafter subjecting the material to hydrolysis and recovering fatty oil from the hydrolyzed mass in a known manner.

Compl. Specn. 12 Pages.

Drg. Nil

CLASS : 83 A1

166719

Int. Cl. : A 21 D, 2/00, 8/00.

**"A METHOD OF MAKING A DOUGH SUITABLE FOR PRODUCING SOFT-TEXTURED BAKED PRODUCTS"**

Applicant : NABISCO BRAND, INC., AT NABISCO BRANDS FLORA, PARSIPPAUY, NEW JORSEY 07054, UNITED STATES OF AMERICA.

Inventors : (1) FRED VANDERVEER, (2) ALOYSIUS J. KNIPPER, (3) ROBERT STRAKA, (4) ALEX J. SQUICCIARINT.

Application No. : 349/Cal/1988 filed on April 29, 1988. Division of Application No. 70/Cal/88 dated 1-2-1985.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

A method of making a dough for producing soft-textured baked products characterized in that an edible firm gel composition capable of being ground is mixed with dough ingredients including flour to form a dough of smooth consistency, the amount of said gel composition being 2 to 50 weight percent of said dough, said firm gel composition being obtained by mixing :

- (i) an edible viscous liquid comprising a corn syrup, high fructose corn syrup, or sucrose syrup;
- (ii) from 0.25 to 4.0 parts by weight of an edible gum capable of being set by calcium ions, and
- (iii) from 0.1 to 4 parts by weight of a calcium ion source for setting said gum,

said parts by weight being based upon 100 parts by weight of said edible viscous liquid, said mixing being to obtain an at least substantially homogenous, lump-free blend, the water content of said gel composition being from 15% to 35% by weight, based upon the weight of said gel composition.

Compl. Specn. 55 Pages.

Drg. Nil

Class : 32 F1 + 55 D2 + 55 E2 + E4

166720

Int. Cl. : C 07 C 45/00, 45/68, 45/72.

**A PROCESS FOR THE PREPARATION OF 3-(4'-BROMOBIPHENYL-4-YL) TETRALIN-1-ONE**

Applicant : KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY, OF 39-1, HAWOLGOK-DONG, SUNG-BOOK-KU, SEOUL, SOUTH KOREA.

Inventors : (1) IN O KIM, (2) SANG GEE LEE.

Application No. : 395/Cal/1988 filed on May 16, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

**8 Claims**

A process for the production 3-(4'-bromobiphenyl-4-yl) tetralin-1-one of the formula IV, of the accompanying drawings, consisting essentially of three steps of: reacting a compound of formula I with ethyl bromoacetate (Reformatsky Reaction) in the presence of a mixed solvent, (such as herein described) to form a compound of formula II;

Application for Patent No. 248/Del/86 filed on 18 March, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules 1972), Patent Office Branch, New Delhi-110005.

### 8 Claims

A method of curing a polyurethane prepolymer comprising reacting an isocyanate terminated urethane prepolymer, said prepolymer being the adduct of from 1.5 to 4.0 equivalents of a polyisocyanate with one equivalent of a polyol, with from 0.80 to 1.2 equivalent of a secondary aromatic diamine characterised in that the secondary aromatic diamine has a structure shown in the accompanying drawings, wherein each alkyl groups, R<sub>1</sub> and R<sub>2</sub>, contains from 4 to 20 carbon atoms at a temperature and between 75°C and 120°C, and recovering the cured polyurethane resulting therefrom.

Compl. Specn. 11 Pages.

Drgs. 1 Sheet

Ind. Cl.: 195 G 116 G

166722

Int. Cl.: B65 G 33/0033/28.

### AN APPARATUS FOR CONVEYING SOLID PARTICULATE MATERIAL

Applicant: FULLER COMPANY, OF 2040 AVENUE "C" P.O. BOX 2040 BETHLEHEM, PENNSYLVANIA 18001, UNITED STATES OF AMERICA, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A.

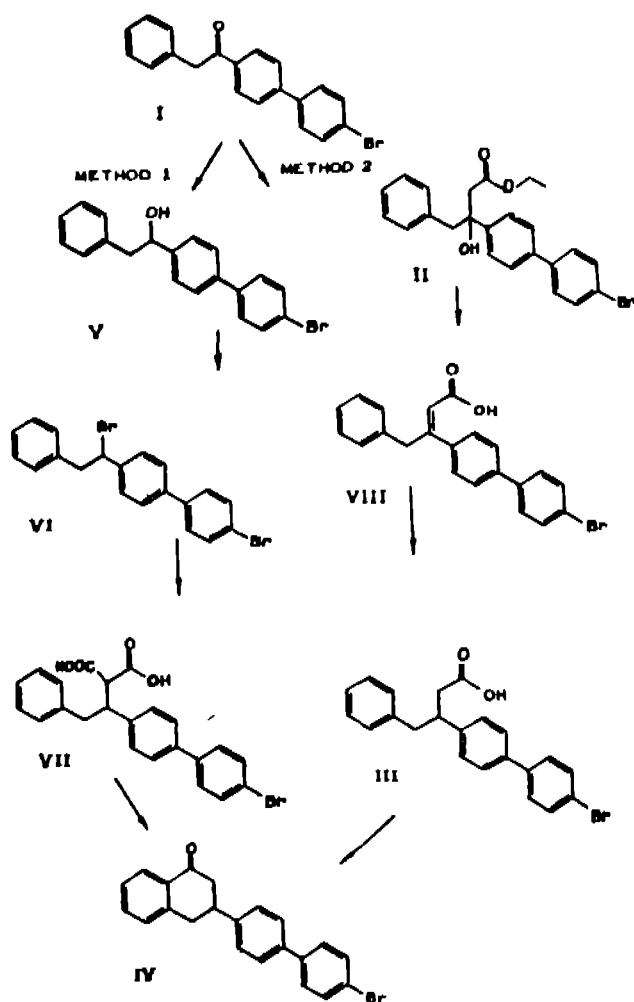
Inventor: STEPHEN ANDREW LUKACZ.

Application for Patent No. 326/Del/86 filed on 10th April, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-5.

### 10 Claims

An apparatus for conveying solid particulate material including a casing (1) having a bore (12) therethrough, an inlet (13) for solid particulate material to be conveyed and an outlet (14) coaxial with one end of the bore (12) for discharging solid particulate material; a screw impeller (20) having a shaft (24) mounted in said bore (12) in the casing (1) for advancing solid particulate material from said inlet (13) to said outlet (14); a pair (21, 22) of bearing means each operatively connected to one end of the casing (1) for rotatably mounting said screw impeller (20) in said casing (1); a discharge (6) chamber connected with the outlet (14) of the casing for receiving solid particulate material from the casing an inlet (31) for gaseous fluid under pressure and an outlet (33) adapted to be connected to a conduit for conveying solid particulate material away from the discharge (14) chamber whereby solid particulate material advanced from said inlet is discharged from said casing through said outlet (14) into said discharge chamber (14) and gaseous fluid under pressure supplied to said discharge chamber (14) entrains the solid particulate material and conveys it through the material conduit to which it is connected, a valve (30) means for selectively closing the outlet (14) of the casing comprising a valve element (40, 60) surrounding the shaft (24) of the screw impeller (20) and pivotably mounted for swinging movement about an axis (26) perpendicular to the screw impeller (20); said valve element being shaped and having an opening (41) positioned therein so that the edges of said opening immediately adjacent the shaft of the screw impeller initially swing away from the shaft at least until the valve element is open sufficient to permit material to be discharged from the casing through the outlet.



Formula II

reacting the compound of formula II with trialkylsilane and trifluoroacetic acid in the presence of a sulfate salt such as herein described and a catalytic amount of boron trifluoride etherate wherein alkyl is 1-2 carbon atoms, to form a compound of formula III; and obtaining the compound of formula IV by the cyclization reaction of the compound of formula III in the presence of polyphosphoric acid in a suitable solvent.

Compl. Specn. 11 Pages.

Drgs. 2 Sheets

Ind. cl.: 32 F

166721

Int. Cl.: C08 G 18/00

### METHOD OF CURING A POLYURETHANE PREPOLYMER.

Applicant: UOP INC., A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE IN THE UNITED STATES OF AMERICA, WITH ITS PRINCIPAL OFFICE LOCATED AT TEN UOP PLAZA, ALGONQUIN & MT. PROSPECT ROADS, DES PLAINES, ILLINOIS 60016, U.S.A.

Inventor(s): DAVID WORTH HOUSE, RAY VERNON SCOTT JR.

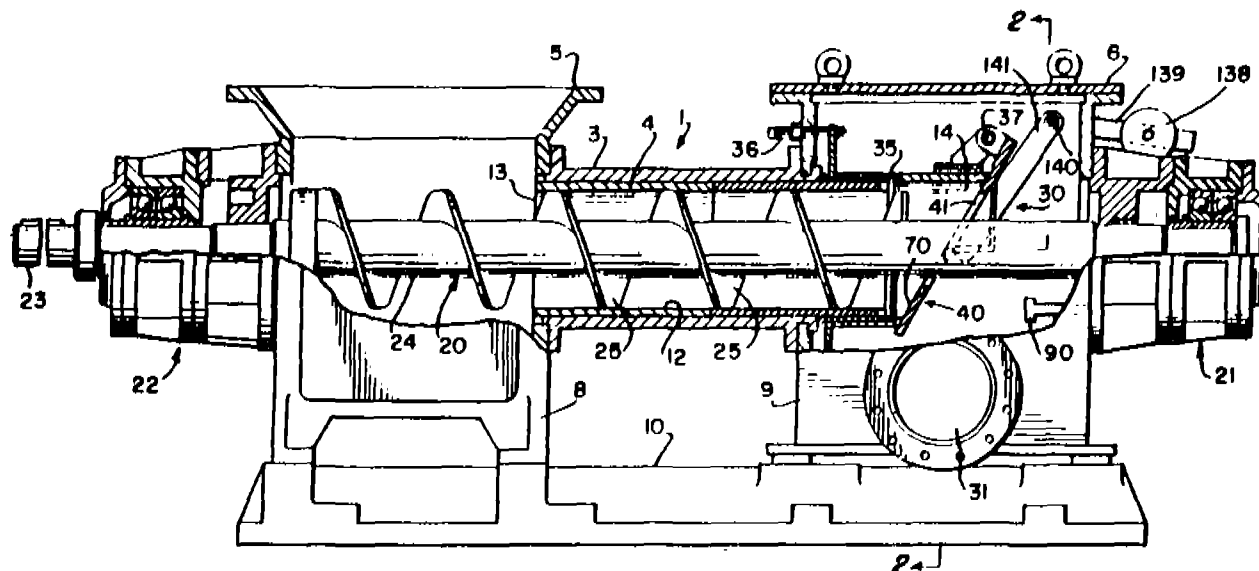


Fig. 1

Compl. Specn. 19 Pages.

Drgs. 2 Sheets

Ind. Cl.: 90 HK.

166723

Int. Cl.<sup>4</sup>: C 03 B 7/00.**DRIVE SYSTEM FOR A GLASS CONTAINER PRODUCTION LINE.**

Applicant: EMHART INDUSTRIES INC., A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF CONNECTICUT, U.S.A., OF 426 COLT HIGHWAY, FARMINGTON, CONNECTICUT 06032, UNITED STATES OF AMERICA.

Inventor(s): WERNER SIDLER &amp; WERNER MUNZ.

Application for Patent No. 411/Del/86 filed on 6th May, 1986.

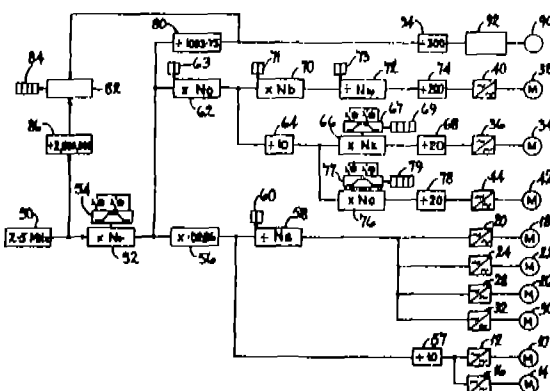
Convention date May 15, 1985/8512269 (U. K.).

Appropriate Office for Opposition Proceedings (Rule 4, Patent Rules, 1972), Patent Office Branch, New Delhi-5.

**10 Claims**

A drive system for a glass container production line, said drive system comprising a first electric motor (12, 10) means for driving a feeder of the production line for producing gobs from molten glass, a second electric motor (20, 18) means for driving a gob distributor of the production line, a third electric motor (36, 34) means for driving a conveyor system of the production line, each said first (12, 10), second (20, 18) and third electric motor (36, 34) means operable at a speed proportional to frequency of an electrical signal supplied thereto and being connected to a signal supply (50, 52) means for supplying electrical signals to said first (12, 10), second (20, 18) and third (36, 34) electric motor means said signal supply means (50, 52) having a source (50) of basic electrical signals with a basic frequency which determines speed of the entire production line and directly determines the speed of the feeder, frequency varying (54) means connected to said source of basic electrical signals for varying the basic frequency and thereby the speed of all the said electrical motor means (12, 10), (20, 18), (36, 34) and said feeder, said gob distributor and said conveyor

system, a distributor multiplier (56, 58) connected between said signal supply means (50, 52) and said second motor means (20, 18) for producing an electrical distributor signal of a frequency obtained by multiplying the basic frequency by a factor reflecting number of sections of a machine manufacturing containers of the production line which determines the speed of the gob distributor, and a conveyor system multiplier (62) connected between said source of basic frequency (50, 52) and said third (36, 34) motor means for producing an electrical conveyor system signal, of a frequency obtained by multiplying the basic frequency by a factor reflecting the number of containers produced by said machine and the required spacing thereof on the conveyor system.



Compl. Specn. 23 Pages.

Drg 1 Sheet

Ind. Cl.: 94 H

166724

Int. Cl.<sup>4</sup>: B 02 C 4/00, 4/02**GRINDING MILL.**

Applicant: FULLER COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 2040 AVENUE 'C' P.O. BOX 2040, BETHLEHAM, PENNSYLVANIA 18001 UNITED STATES OF AMERICA.

Inventors : KENNETH WIDROW HANSTINE, STEPHEN ANDREW LUKACZ & JAFFREY NORMAN NELSON.

Application for Patent No. 681/Del/86 filed on 25 July, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

#### 4 Claims

A grinding mill for grinding solid bulk material such as coal or cement raw meal which comprises, a housing (2), a grinding (5) table mounted within said housing (2) for rotation about a substantially vertical axis, at least grinding roller (10) mounted for rotation about its own axis which is at an angle to said vertical axis of said grinding (5) table, said at least one grinding (10) roller being mounted on said grinding (5) table and cooperable with said table (5) for grinding material between said table and said roller (10) characterised by means for supporting said grinding roller comprising a non-hydraulic pressurised flexible (22) pneumatic cylinder a shaft (18) connected to said grinding (10) roller a lever (15) connected to said (18) shaft, a crank (20) arm located between said pneumatic cylinder and said roller and connected to said shaft (18) at one end and co-operating at the other end and with said pneumatic cylinder so that said pneumatic cylinder (22) exerts an upwards force on said crank (20) arm, said upward force being transmitted from said crank (20) arm to said lever through said shaft (18) to produce a downward grinding force on said grinding (10) roller.

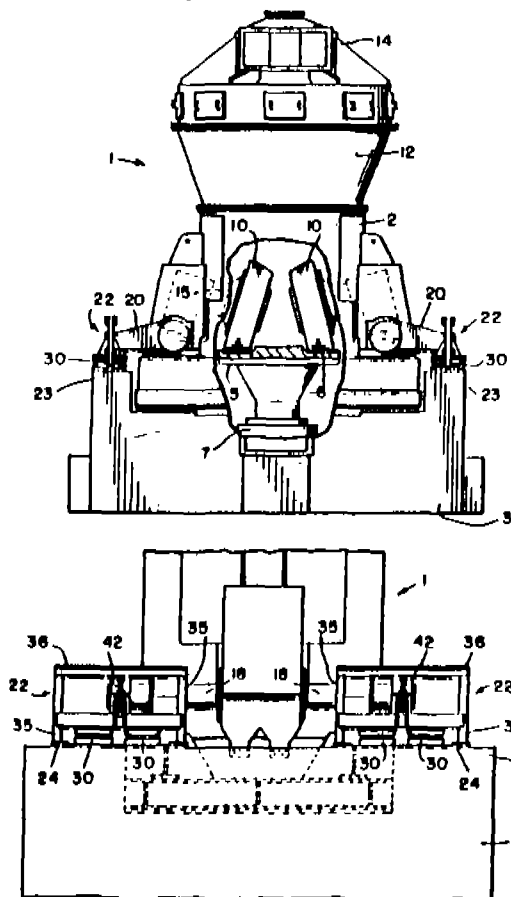


Fig. 2

Compl. Specn. 11 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 87 D I

166725

Int. Cl.<sup>4</sup> : A 63 H 33/08, 33/12

#### A TOY.

Applicant : LEGO A/S. FORMERLY KNOWN AS INTER-LEGO A/S, A CORPORATION OF DENMARK, OF AASTVEJL, DK-7190 BILLUND, DENMARK.

Inventors : ERIK PETER TAPDRUP, FLEMING HOJBERG OLSEN.

Application for Patent No. 735/Del/86 filed on 13th August, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

#### 7 Claims

A toy comprising a base (7) plate, the front side of said base plate being provided with a silhouette (8) plate and a plurality of removable activity (1-6) units characterised in that the activity units have primary and secondary coupling (15) means having a pre-determined modular spacing therebetween, said coupling means being connectible to corresponding coupling means of another activity unit, the rear side of said base plate also being provided with coupling of means with a mutual modular spacing and in that the base plate comprises releasable locking means to engage said activity units.

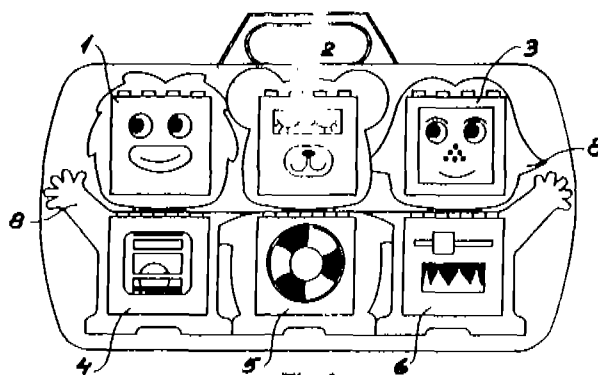


Fig. 1

Compl. Specn. 10 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 128 F

166726

Int. Cl.<sup>4</sup> : A 61 M 5/00

A FLOW CONTROL DEVICE FOR CONTROLLING FLOW OF A LIQUID DISPENSED INTRAVENOUSLY IN METERED QUANTITIES.

Applicant & Inventor : VIVEK MULL, CHANDRA AGRO PVT. LTD., MULL BUILDING, ASHOK MARG, LUCKNOW, UTTAR PRADESH, INDIA, AN INDIAN NATIONAL.

Application for Patent No. 784/Del/86 filed on 2nd September, 1986.

Complete specification left on 30th November, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

#### 4 Claims

A flow control device for controlling flow of a liquid dispensed intravenously in metered quantities comprising two sockets (A & G) having passages (h<sup>1</sup>) aligned coaxially for passing the liquid therethrough, a cylindrical coupling sleeve member (F) with a diaphragm (2) having plurality of passages of different sizes for passing liquid therethrough provided for interconnecting the said sockets

(A & G), the passages (h<sup>1</sup>) in the sockets (A & G) and one of the passages (h) in said diaphragm being alignable coaxially, the sockets (A & G) having tubular projections (D & D<sup>1</sup>) into which the passage (h<sup>1</sup>) in the sockets extend, the said coupling member (F) being movable about its axis relative to said sockets (A & G) for regulating the flow of the liquid through the said passage (h), the coupling member being graduated to indicate the quantity of the liquid flowing through the passages (h & h<sup>1</sup>) when the coupling member (f) is moved to any one position.

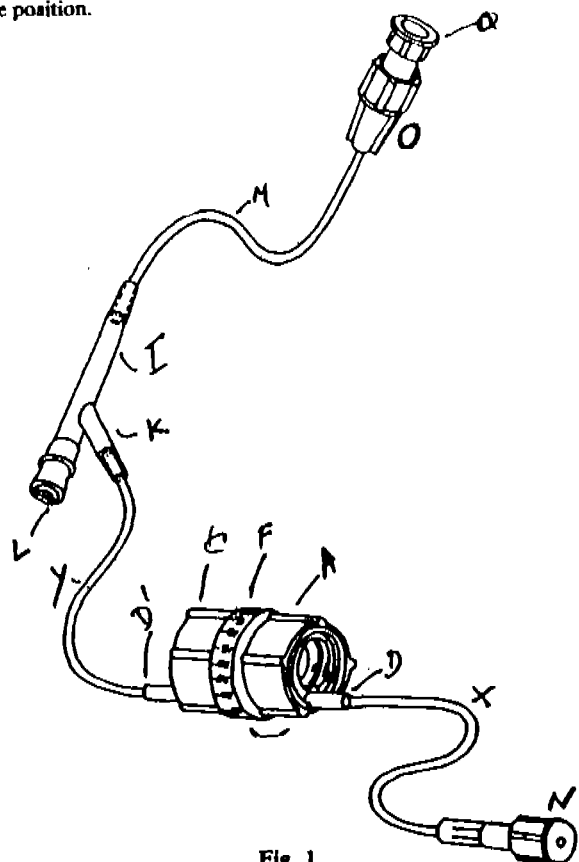


Fig. 1

Compl. Specn. 7 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 50 D

166727

Int. Cl.<sup>4</sup> : F 24 F 3/14, 6/12**AN IMPROVED AIR COOLER.**

**Applicant & Inventor :** RAM NARAIN KHER, AN INDIAN NATIONAL, OF B-1/148, LAJPAT NAGAR, NEW DELHI-110024, INDIA.

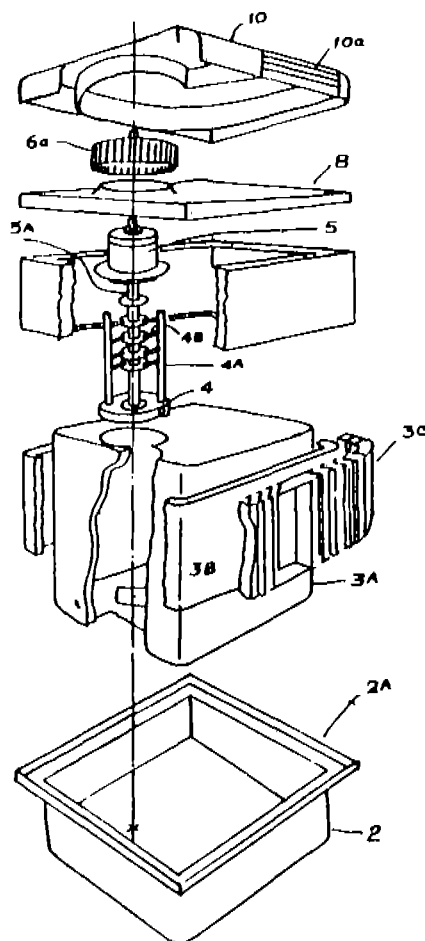
Application for Patent No. 821/Del/86 filed on 17 September, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

**6 Claims**

An improved air cooler comprising a water tank (2) a spray chamber (3) consisting of at least one pad (3A/3B) along all the four sides of the said spray chamber (3) an air chamber (7) is provided above said spray chamber (3) for supply of cooled air, characterised in that a pump having two delivery pipes (4A) opposite to each other mounted on the said water tank (2) for delivering water to the spaced discs (5B) mounted on a rotatable shaft (5A), said shaft having discs disposed

within said spray chamber (3) for converting water into fine particles such that atmospheric air drawn through said pads is further cooled by the water in the form of fine particles present in the said spray chamber (3), a blower (6) disposed within said air chamber (7) for discharge of cooled air through an outlet (10A).



Compl. Specn. 9 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 205 B, F, G, (LVI)

166728

Int. Cl.<sup>4</sup> : B 29 D 30/34, 30/54**BEAD SEAL RING UNIT.**

**Applicant :** BANDAG LICENSING CORPORATION, AN IOWA CORPORATION, OF BANDAG CENTER, MUSCATINE, IOWA 52761, UNITED STATES OF AMERICA.

**Inventors :** DONALD DEE BREWER, RONALD RAY SEILER & THOMAS JOHN NIEDERGESES.

Application for Patent No. 834/Del/86 filed on 22nd September, 1986.

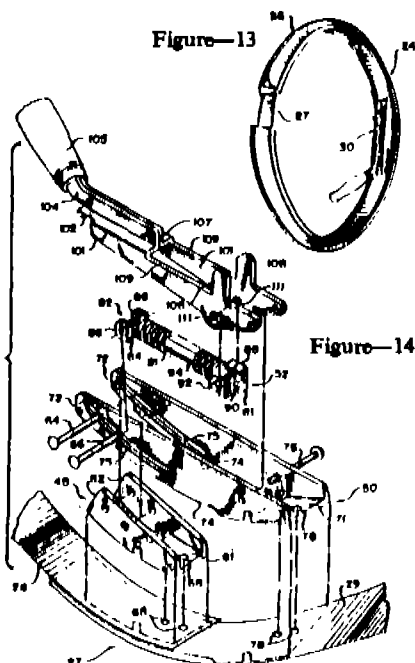
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

**12 Claims**

A bead seal ring unit for use in retreading of radial tires in a pre-cured tread system with a curing envelope comprising an outer rubber ring (26) a metal band (27), said rubber ring (26) being mounted on said metal band (27), a mechanical locking means (30) connected to said metal band (27) having an unlocked position wherein said ring



unit is at an initial diameter smaller than a bead diameter of a said radial tire said locking means (30) being movable to a locking position wherein said ring unit is expanded to a diameter larger than said bead diameter to urge a circumferential surface of a curing envelope (12) into positive sealing engagement with the bead surface (16, 18) of a tire bead member.



Compl. Specn. 19 Pages.

Drgs. 5 Sheets.

Ind. Cl. : 130 F

166729

Int. Cl.<sup>4</sup> : B 22 D 7/02

**INSTALLATION FOR THE STEP BY STEP EXTRACTION FROM AN INGOT-MOULD OF AN ELONGATED SOLID PRODUCT.**

Applicant: PONT-A-MOUSSON S.A., A FRENCH COMPANY, OF 91 AVENUE DE LA LIBERATION, 54000 NANCY, FRANCE.

Inventors: YVES GOURMEL, MICHEL PIERREL.

Application for Patent No. 839/Del/86 filed on 23rd September, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

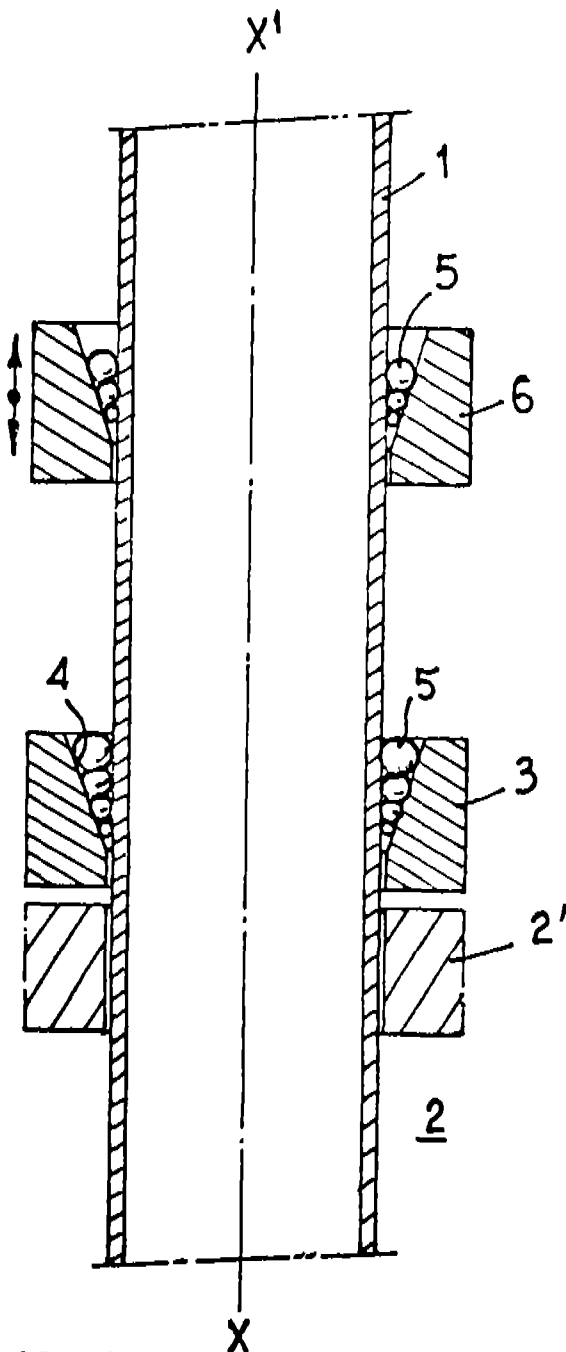
#### 4 Claims

Installation for the step by step extraction from an ingot-mould of an elongated solid product (1) obtained by continuous bottom casting, shaping, calibration and solidification in a suitable chamber (2), the said installation being characterised in that it is constituted :

by a first fixed device (3), located in the immediate vicinity of the outlet orifice of the said chamber, and constituted by a ring, surrounding the said solid, having an inner face (4) in the shape of a frustum of a cone having an opening comprised between 10° and 20° and having its small base towards the bottom, the space situated between the outer surface of the said solid and the inner face of the said ring being provided with balls (5) of several diameters to ensure the wedging of the said

solid in the case of the beginning of a movement in the upstream direction of this solid;

and of a second movable device (6) having the same structure as the first device and also comprising balls, this second device carrying out a reciprocating longitudinal movement along the axis of the said solid.



Compl. Specn. 9 Pages.

Drg. 1 Sheet.

Ind. Cl. : 6 B, 166 A

166730

Int. Cl.<sup>4</sup> : B 63 J 2/14

**A STRUCTURE FOR HOLDING LIQUIFIED GAS.**

Applicant: HARSCO CORPORATION, A CORPORATION OF THE STATE OF DELAWARE AND HAVING AN OFFICE AT

HARRISBURG, PENNSYLVANIA, UNITED STATES OF AMERICA.

Inventors : JOHN KELVIN YOUNG & ALFRED BARTHEL.

Application for Patent No. 127/Del/87 filed on 16th February, 1987.

Divisional to application No. 801/Del/84 filed on 16th October, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

#### 4 Claims

A structure (27) for holding a liquified gas such as liquid nitrogen in adsorption and capillary suspension comprising a core (28) permeable to liquid and gaseous nitrogen having a cavity (31) extending therethrough and a liquified gas adsorption matrix (30) composed of a mass of very small diameter inorganic fibers surrounding said core as a homogeneous body.

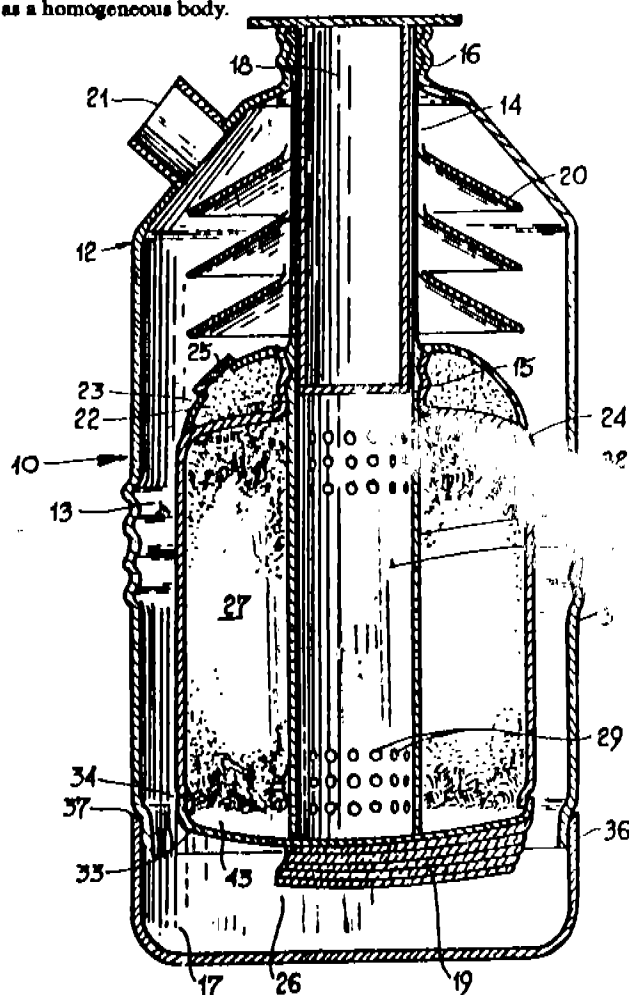


Fig. 1

Compl. Specn. 18 Pages.

Drgs. 3 Sheets.

Ind. Cl. : 51 D; 129 FG

166731

Int. Cl.<sup>4</sup> : B 23 C 3/00

STRIP GRINDING MACHINE FOR GRINDING THE EDGES OF A METAL STRIP IN THE MANUFACTURE OF SAFETY RAZOR BLADES.

Applicant : KHOSLA ENGINEERS, AN INDIAN REGISTERED PARTNERSHIP FIRM OF 644, SECTOR-16, CHANDIGARH, INDIA, OF WHICH LAJPATVAI KHOSLA AND RAJESH KHOSLA, INDIAN NATIONALS OF THE SAME ADDRESS ARE THE PARTNERS.

Inventor : RAJESH KHOSLA.

Application for Patent No. 67/Del/86 filed on 23rd January, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

#### 4 Claims

A metal strip grinding machine for use in the manufacture of safety razor blades comprising a plurality of grinding heads having rotatable grinding wheels through which a metal strip is continuously drawn, said grinding wheels forming facets on opposite sides of the strip and along the longitudinal sides of the strip, said wheel being inclined to each other, each grinding wheel being movable towards or away from the strip for adjusting the feed of the strip to the grinding wheels, characterised in that a feed adjustment device for moving the grinding wheel towards and away from the metal strip comprises a pivoted lever of each grinding head being rotatably mounted adjacent one end of said lever pivoted intermediate its ends, the other end of the lever biased by a spring capable of being moved against the force of the spring to move the grinding wheel towards the metal strip under the action of feed adjustment device, driving means for driving said adjustment device, a remote control device connected to the said feed adjustment device for controlling the feed adjustment, said control device having a micro processor optimum rates of feed for different sets of parameters governing the knock off.

Compl. Specn. 10 Pages.

Drg. 1 Sheet.

Ind. Cl. : 143 D4, 5

166732

Int. Cl.<sup>4</sup> : B65B 11/00

MACHINE FOR WRAPPING BODIES SUCH AS SOAP AND THE LIKE.

Applicant : AZONARIA COSTRUZIONI MACHINE AUTOMATICHE, A.C.M.A., S. p. A., AN ITALIAN COMPANY OF VIA CRISTOFORO COLOMBO, 1 40131 BOLOGNA, ITALY.

Inventors : FRANCO AIUOLA & LUCIANO NANNINI.

Application for Patent No. 226/Del/86 filed on 11th March, 86.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

#### 7 Claims

A machine for wrapping bodies (5) such as soap and the like comprising a drum (1) intermittently rotatable through at least one half turn about an axis, an insertion station (2) to which there is supplied upon each said half turn of said drum of (1) at least one wrapping element (4) in a substantially tangential position with respect to said drum (1), an ejection station (3) disposed at a diametrically opposite side of said drum (1) with respect to said insertion station (2), a housing (14) located adjacent to said wrapping element (4), said housing (14) extending diametrically through said drum (1) so as to intermittently pause in alignment with said insertion station (2) upon every said half turn of said drum (1), a block (15) slidably mounted in said

housing (14), a space defined in said housing (14) adjacent said block (15) for accommodation at least one of said bodies (5), and a reciprocable thrust element (23) mounted on said insertion station (2) so as to push at least one of said bodies (5b) against said wrapping element (4) and insert both said wrapping element (4) and said at least one of said bodies (5b) into the housing (14) when said housing (14) intermittently pauses in alignment with said insertion station (2), characterized in that said reciprocable thrust element (23) is interconnected to said block (15) and moves simultaneously therewith, said block (15) facing said insertion station (2) upon said reciprocable thrust element inserting said wrapping element (4) and said at least one body (5b) into said housing.

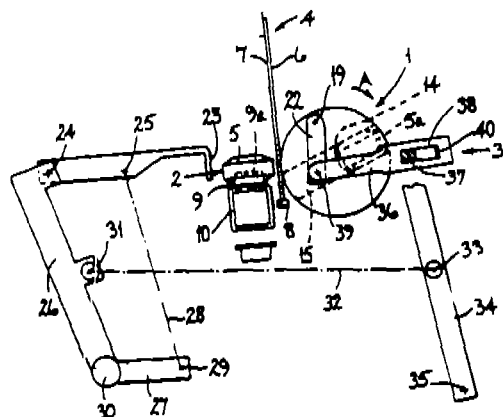


Fig. 1a

Compl. Specn. 1/6 Pages.

Drgs. 4 Sheets.

Ind. Cl.: 99 E F

166733

Int. Cl.<sup>4</sup>: CO 3C 25/00

DEVICE FOR MANUFACTURING A HOLLOW WORK-PIECE OF ANY SHAPE BY LAYING A COMPOSITE CONTINUOUS RESIN-IMPREGNATED FIBRE BASED RIBBON ON THE SURFACE OF A SHAPING MANDREL OR MOULD.

Applicant: AEROSPATIALE SOCIÉTÉ NATIONALE INDUSTRIELLE, A COMPANY ORGANISED AND EXISTING UNDER THE LAWS OF FRANCE, OF 37 BOULEVARD DE MONTMORENCY, PARIS 75016, FRANCE.

Inventors: JEAN-LOUIS TISNE & DANIEL CABANEL.

Application for Patent No. 245/Del/86 filed on 17th March, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

14 Claims

A device for manufacturing a hollow work-piece of any shape by laying a composite continuous resin-impregnated fibre based ribbon on the surface of a shaping mandrel (1, 10) or mould by an applicator member (5) which brings the ribbon (25) into contact with the surface of the shaping mandrel (1, 10) or mould without tension in said ribbon (25) said device comprising an applicator member (5) consisting of a rotatable cylinder (20) connected transversely at the end of a

longitudinal applicator head (21, 22) said longitudinal applicator head (21, 22) being connected to an orientable support mechanism (6) which located said applicator head (21, 22) along an axis normal to said surface at a contact point of said applicator member (5) with said surface, said support mechanism (6) having means (27, 28, 29) for orienting axis of said applicator member (5) perpendicularly to a tangent to a path of said ribbon (25) at said contact point, said ribbon (25) extending from storage reels (8) on said support mechanism (6) and passing over said applicator member (5) to be between said applicator member (5) and said surface at said contact point where it is applied to said surface without tension in said ribbon (25) said support mechanism (6) being connected to a programmed device (9) for controlling said support mechanism (6) to orient said applicator head (21, 22) whereby said applicator head (21, 22) is always maintained normal to said surface at said contact point of said applicator member (5) therewith.

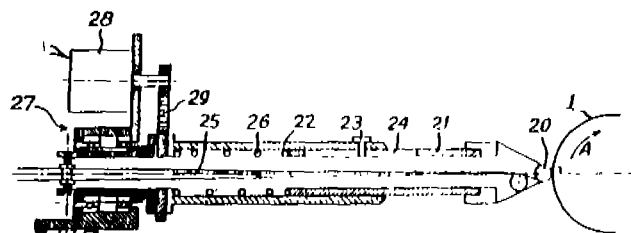


Fig. 3

Compl. Specn. 18 Pages.

Drgs. 5 Sheets.

Ind. Cl.: 39 E [III]

166734

Int. Cl.<sup>4</sup>: C 01 B 33/107

IMPROVED PROCESS FOR THE PRODUCTION OF TRICHLOROSILANE (TCS) FROM SILICON TETRACHLORIDE.

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: VIJAY GANGADHAR BEURGAONKAR, AKHOURY PURNENDU BHUSHAN SINHA, PRABHAT RANJAN SHRIVASTAVA, SANJAY BHALCHANDRA, JACINTO AUGUSTINO PIRES.

Application for Patent No. 281/Del/86 filed on 25th March, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

7 Claims

An improved process for the preparation of trichlorosilane (TCS) from silicon tetrachloride (STC) comprises passing a preheated mixture of vapours of silicon tetrachloride and hydrogen in the proportion of 4 to 33% mole STC : 67 to 96% mole of hydrogen, into a reactor tube which is kept at a temperature in the range of 800° C—1250° C, at a feed that the residence time of reaction is below 2.5 seconds, cooling the reaction mixture and separating the mixture of STC and TCS by known methods.

Compl. Specn. 9 Pages.

Ind. Cl. : 69 (O)

166735

Int. Cl. : H 01 H 1/00

**A CONTACT FOR AN ELECTRIC SWITCH.**

Applicant : VACUUM INTERRUPTERS LIMITED, A BRITISH COMPANY, OF 68 BALLARDS LANE, FINCHLEY, LONDON N3 2 BU, ENGLAND.

Inventor : LESLIE THOMAS FALKINGHAM.

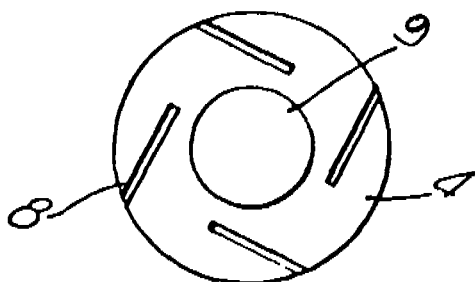
Application for Patent No. 367/Del/86 filed on 24th April, 1986.

Convention date April 24th, 1985/8510442/(U.K.)

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**5 Claims**

A contact for an electric switch, comprising; a cup-shaped conductive body member 2 having a base connected to an annular side wall defining a circular opening, and a coaxial disc of conductive material connected to the rim of the annular side wall 6 opposite to the base to close the circular opening; the disc 4 having a plurality of part-chordal slots 5 extending from the rim along part of a chord inclined to the corresponding radius, and the body member having a like plurality of slots through the side wall each defining a helix on the axis of the body member, which helical slots are continuations of respective chordal slots of the disc.



Compl. Specn. 6 Pages.

Drg. 1 Sheet.

Ind. Cl. : 69(O)

166736

Int. Cl. : H 01 H 1/00

**A CONTACT FOR AN ELECTRIC SWITCH.**

Applicant : VACUUM INTERRUPTERS LIMITED, A BRITISH COMPANY, OF 68 BALLARDS LANE, FINCHLEY, LONDON N3 2BU, ENGLAND.

Inventor : LESLIE THOMAS FALKINGHAM.

Application for Patent No. 368/Del/86 filed on 24th April, 1986.

Convention date April 24th, 1985/8510441/(U.K.)

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

**9 Claims**

A contact for an electrical switch comprising a cup-shaped conducting member having a bottom wall, and an annular side wall 3

surrounding the bottom wall 2 and having a series of inclined slots spaced around it, the slots 4 extending partly across the bottom wall, wherein a ring 5 of material which is more resistant to high temperatures than the material of the conducting member extends round the outside and/or inside surface of the annular side wall, and an annular layer of contact material having a lower weld-strength than the material of the conducting member is disposed on the top surface of the annular side wall, which layer extends over both the inner and outer edges of the top surface.

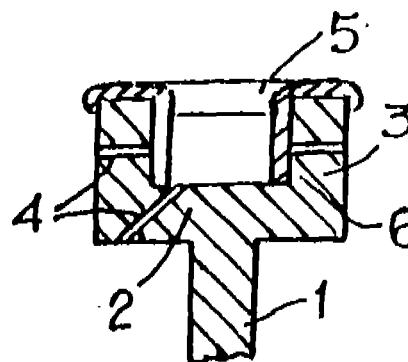


Fig. 1

Compl. Specn. 8 Pages.

Drg. 1 Sheet.

Ind. Cl. : 173B

166737

Int. Cl. : B 05 B 7/00

**POWDER SPRAY GUN FOR SPRAYING AIR ENTRAINED SOLID PARTICULATE POWDER.**

Applicant : NORDSON CORPORATION, OF 555 JACKSON STREET, P.O. BOX 151, AMHERST, OHIO 44001, UNITED STATES OF AMERICA, A CORPORATION OF THE STATE OF OHIO, U.S.A.

Inventor : DOUGLAS C. MULDER.

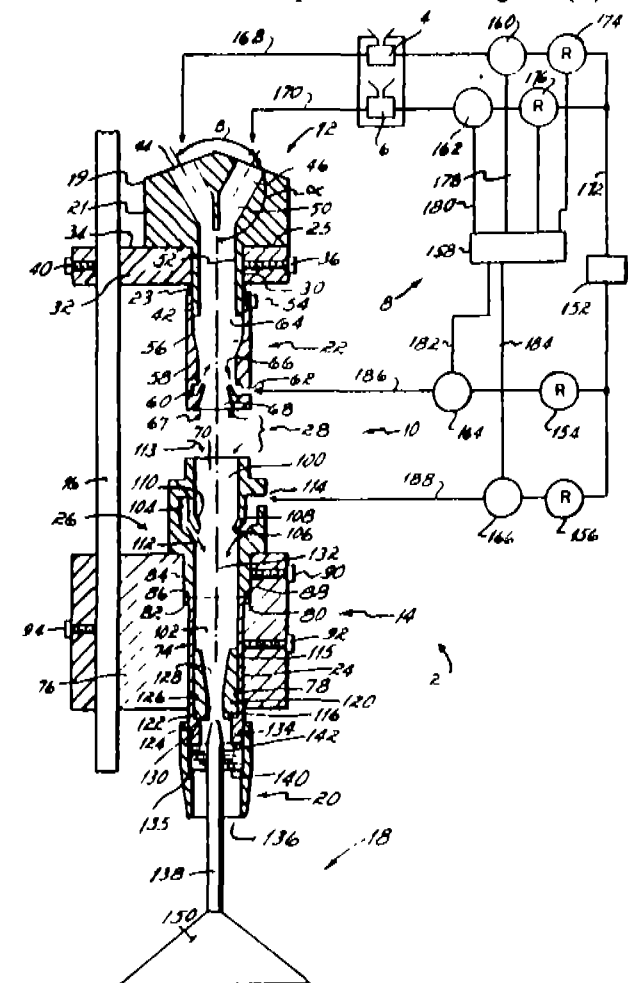
Application for Patent No. 380/Del/86 filed on 28th April, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

**10 Claims**

A powder spray gun for spraying air entrained solid particulate powder, said gun having an inlet end (12) and a discharge end (14), an opening (44, 46) for receiving solid particulate powder entrained in an air stream at said inlet end (12) of said gun, impacting (22) means for impacting said air entrained powder with a relatively high velocity air stream of compressed air directed generally upstream of said gun so as to create homogeneity of said powder in said air stream and thereby more evenly distribute said powder throughout said air stream, said impacting means (22) comprising an inverted air flow amplifier (22) having a downstream end (68) open to ambient air and an upstream

end (64) in communication with said powder receiving opening (12), and transporting means (26) for passing said air entrained powder from said inverted air flow amplifier to said discharge end (14).



Compl. Specn. 27 Pages.

Dr. 2 Sheets.

to contain a plurality of labels which are to be affixed onto the said bottles or containers, a label transfer assembly for gumming and transferring the said label from the said label magazine onto the bottles or containers, a gum applicator provided in association with the said label transfer assembly a label picking member provided for picking up the gummed labels from the said label transfer assembly (T) and applying the same onto the said bottles or containers and a pressing roller and massaging belt provided for properly pasting and affixing the gummed labels onto the said bottles or containers.

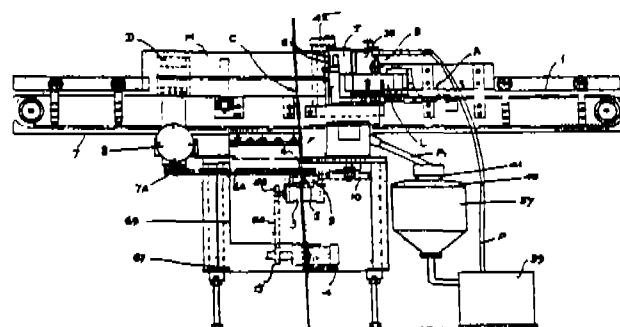


Fig. 1

Compl. Specn. 24 Pages.

Dr. 3 Sheets.

Ind. Cl.: 134 B, 24D 4

166739

Int. Cl.: F 16D 31/00

**CLUTCH MECHANISM HAVING IMPROVED LUBRICATING OIL DISTRIBUTION MEANS AND FOR CONNECTING A VEHICLE AIR COMPRESSOR TO A VEHICLE ENGINE.**

Applicant: ALLIED CORPORATION OF COLUMBIA ROAD AND PARK AVENUE, MORRIS TOWNSHIP, MORRIS COUNTY, NEW JERSEY 07960, UNITED STATES OF AMERICA. A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, STATES OF AMERICA.

Inventors: FRED WALTER, HOFFMAN & RICHARD JOSEPH REITZ.

Application for Patent No. 407/Del/86 filed on 5th May, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

5 Claims

Clutch mechanism (10) having improved lubricating oil distribution means and for connecting a vehicle air compressor (14) to a vehicle engine (12), said air compressor (14) having a crankshaft (35) with a stub portion (36) projecting from the compressor (14) for mounting said clutch mechanism (10) comprising input drive means (78) connectable to the vehicle engine for driving the vehicle engine (12), clutch plates (84, 86) mounted on said stub portion (36) and on said input drive means (78), and actuating means (64) for bringing said clutch plates (84, 86) into driving engagement with one another, said clutch plates (84, 86) and said air compressor (14) being lubricated by lubricating oil communicated through passage means (40) extending through said crankshaft (35), characterised in that said passage means (40) is provided with communicating means (96) for passing lubricating oil from said passage means (40) to said clutch plates (84, 86) said communicating means being provided with flow limiting

Ind. Cl.: 111

166738

Int. Cl.: B 65C 9/00.

**A LABELLING MACHINE FOR AFFIXING ONTO BOTTLES OR CONTAINERS.**

Applicant & Inventor: SWARAN SINGH & SUSHIL KAUR.

Application for Patent No. 398/Del/86 filed on 2nd May, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

18 Claims

A labelling machine for affixing labels onto bottles or containers comprising a bottle or container feed means (A), work means (B) where the labels are affixed onto the said bottle or container, a bottle or container discharge means (C), the said feed means (A) and the discharge means (C) comprising a conveyor carried in a conveyor assembly (7), the said feed means provided for conveying the said bottles or container into the said work means, a label magazine adapted

means (102) for limiting the rate of flow of lubricant to said clutch plates (84, 86).

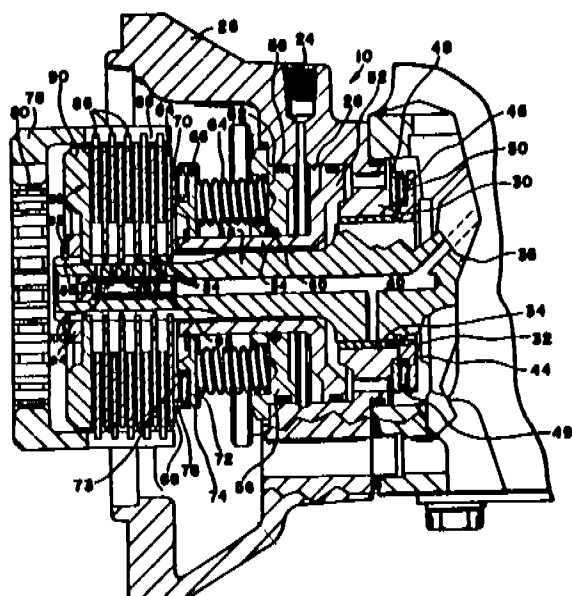


Fig. 2

Compl. Specn. 10 Pages.

Drg. 1 Sheet.

Ind. Cl.: 55 E2

166740

Int. Cl. 4: A 61K-35/78.

#### A PROCESS FOR THE PREPARATION OF A MEDICATED OIL FROM WRIGHTIA TINCTORIA.

Applicant: THE DIRECTOR, CENTRAL COUNCIL FOR RESEARCH IN AYURVEDA & SIDDHA, S-10 GREEN PARK EXTENSION, NEW DELHI-110016. INDIA, AN INDIAN NATIONAL.

Inventors: JALAKENDAPURAM RAMASAMY SRISHNA-MURITHI & GOPALASWAMY VELUCHAMY.

Application for Patent No. 800/Del/87 filed on 11th September, 1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

#### 4 Claims

A process for the preparation of a medicated oil from wrightia tinctoria which comprises in soaking the leaves in coconut oil, exposing the oil containing the leaves to sunlight, for a period of (18 to 24) hours and then draining the oil therefrom.

Compl. Specn. 11 Pages.

CLASS: 32A1

166741

Int. Class: CO9b—27/00

#### PROCESS FOR PREPARING FIBRE WATER-SOLUBLE MONOAZO COMPOUND.

Applicant: HOECHST AKTIENGESellschaft, OF D-FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

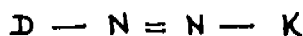
Inventors: (1) HARTMUT SPRINGER, (2) GERD KONIG.

Application No. 790/Cal/85 filed on November 5, 1985.

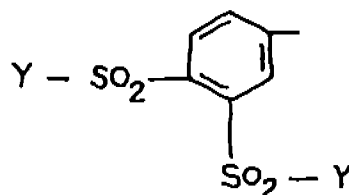
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

#### 15 Claims

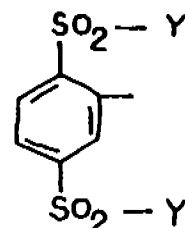
A process for preparing a fibre-reactive water-soluble monoazo compound of the general formula (1) of the accompanying drawings in which D is a radical of the general formula (2a) or (2b) in which Y is a vinyl group or a group of the general formula (4)



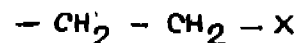
Formula (1)



Formula (2b)

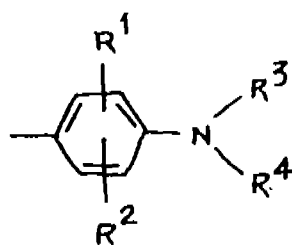


Formula (2a)

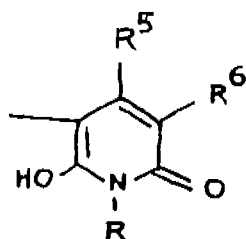


Formula (4)

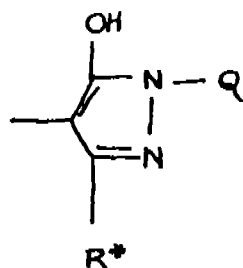
in which X is a sulfato group, a thiosulfato group, a phosphato group, an alkanoyloxy group of 2 to 5 carbon atoms, a benzoyloxy group, a N, N-dimethyl- or N, N-di-ethyl-thio-carboxulfide group, a dimethylamino or diethylamino group, a trialkylammonium-halide group, a chloride atom, a bromine atom or a fluorine atom, a pyridinium halide group, a trialkylammonium-methosulfate group, a pyrimidinum halide group, a dimethylammonium chloride or a diethylammonium chloride group, a p-tosyloxy group, a dimethylaminosulfonyloxy group, a N-methyl-methylsulfanomido group, a methylsulfonyloxy group, a sulfophenyl-sulfonyloxy group, a phenylsulfonyloxy group, a thiocynato group, a trichloroacetyloxy group, a dichloroacetyloxy group, a monochloroacetyloxy group, a dimethylaminosulfonyloxy group or a diethylaminosulfonyloxy group, and K is a radical of the general formula (3a), (3b), (3c) or (3d) in which the radicals Y are defined as above R<sup>1</sup> is a hydrogen atom or an alkyl group of 1 to 4 carbon atoms, an alkoxy group of 1 to 4 carbon atoms, a sulfo group, a carboxy group, a carbalkoxy group of 2 to 5 carbon atoms, a halogen atom, or an alkoxy group of 1 to 4 carbon atoms which is substituted by a hydroxy, acetyloxy, carboxy, carbamoyl or cyano group or by a halogen atom;



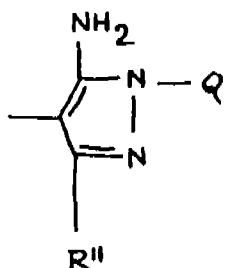
Formula (3a)



Formula (3b)



Formula (3c)



Formula (3d)

$R^1$  is a hydrogen atom, an alkyl group of 1 to 4 carbon atoms, an alkoxy group of 1 to 4 carbon atoms, a halogen atom, the cyano group, a trifluoromethyl group, an alkoxy group of 1 to 4 carbon atoms which is substituted by a hydroxy, acetoxy, carboxy, carbamoyl or cyano group or by a halogen atom, or is an alkanoylamino group of 2 to 5 carbon atoms which can be substituted by chlorine, bromine, alkoxy of 1 to 4 carbon atoms, phenoxy, phenyl, hydroxy, carboxy or sulfo, or is an alkenoylamino group of 2 to 4 carbon atoms which can be substituted by chlorine, bromine, carboxy or sulfo, or is a benzoylamino group which can be substituted in the benzene nucleus, or is an alkylsulfonyl group of 1 to 4 carbon atoms, or a phenylsulfonyl group which can be substituted in the benzene nucleus, or is an alkylsulfonylamino group of 1 to 4 carbon atoms which can be substituted by hydroxy, sulfo, chlorine, bromine or alkoxy of 1 to 4 carbon atoms, or is a phenylsulfonylamino group which can be substituted in the benzene nucleus, or is a carbamoyl group which can be monosubstituted or disubstituted at the nitrogen atom by 1 or 2 substituents from the group consisting of alkyl of 1 to 4 carbon atoms, substituted alkyl of 1 to 4 carbon atoms, cycloalkyl, phenyl and substituted phenyl, or is a sulfamoyl group which can be monosubstituted or disubstituted at the nitrogen atom by 1 or 2 substituents from the group consisting of alkyl of 1 to 4 carbon atoms, substituted alkyl of 1 to 4 carbon atoms, cycloalkyl, phenyl and substituted phenyl, or is the ureido group or a ureido group which is monosubstituted or disubstituted at the terminal nitrogen atom by 1 or 2 substituents from the group consisting of alkyl of 1 to 4 carbon atoms, substituted alkyl of 1 to 4 carbon atoms, cycloalkyl, phenyl and substituted phenyl;

$R^3$  is a hydrogen atom, or an alkyl group of 1 to 6 carbon atoms which can be substituted, or is an alkenyl group of 2 to 5 carbon atoms which can be substituted by a carboxy or sulfo group or by a chlorine or bromine atom, or is a cycloalkyl radical of 5 to 8 carbon atoms;

$R^4$  is a hydrogen atom, or an alkyl group of 1 to 6 carbon atoms which can be substituted, or is an alkenyl group of 2 to 5 carbon atoms which can be substituted by a carboxy or sulfo group or by a chlorine or bromine atom, or is a cycloalkyl radical of 5 to 8

carbon atoms, or a phenyl radical which can be substituted, or a naphthyl radical which can be substituted by 1, 2 or 3 sulfo groups and optionally by a chlorine atom, an alkoxy group of 1 to 4 carbon atoms, an alkyl group of 1 to 4 carbon atoms, an alkanoylamino group of 2 to 5 carbon atoms or an optionally sulfo-substituted benzoylamino group, or is a heterocyclic radical which can have one or two fused-on carbocyclic rings, it being possible for the carbocyclic rings to be further substituted and the heterocyclic radical to be substituted at the carbon atoms and/or at the heterocyclic atoms by optionally substituted alkyl groups and/or optionally substituted phenyl radicals, or

$R^3$  and  $R^4$  together with the nitrogen atom and optionally 1 or 2 further hetero atoms represent a saturated heterocyclic radical;

$R^5$  is a hydrogen atom, an alkyl group of 1 to 4 carbon atoms, which can be substituted by a sulfo or carboxyl group, or is a phenyl radical;

$R^6$  is a hydrogen atom, a sulfo group, a sulfo-substituted alkyl group of 1 to 4 carbon atoms, a carbamoyl group or a cyano group;

$R$  is a hydrogen atom, or an alkyl group of 1 to 6 carbon atoms which can be substituted by a sulfato, phosphato, carboxy, hydroxy or alkanoylamino group of 2 to 5 carbon atoms;

$R^*$  is a methyl group, a carboxy group, a carbalkoxy group of 2 to 5 carbon atoms, a carbamoyl group or an optionally sulfo-, carboxy-, methyl-, ethyl-, methoxy-, ethoxy- and/or chlorine-substituted phenyl radical;

$R''$  is a methyl group, a carbamoyl group or an optionally carboxy-, sulfo-, methyl-, ethyl-, methoxy-, ethoxy- and/or chlorine-substituted phenyl group;



Formula (6)



Formula (7)

$Q$  is a phenyl radical which can be substituted or is a naphthyl radical which can be substituted by 1, 2 or 3 sulfo groups and optionally by an alkyl group of 1 to 4 carbon atoms, an alkoxy group of 1 to 4 carbon atoms, a chlorine atom or an alkanoylamino group of 2 to 5 carbon atoms, which comprises diazotizing a compound of the general formula (6) in which  $D$  is a radical of the general formula (2a) or (2b) in which  $Y$  is defined as above and coupling the diazotized compound with a coupling component of the general formula (7) in which  $K$  is defined as above.

CLASS : 136E,+F

166742

Int. Class : B28b, 7/22, 21/42, 21/76 and 23/00

MOULDING DEVICE FOR MODULAR CONCRETE UNIT.

Applicant & Inventor : YUAN-HO LEE OF NO. 851, CHUNG-SAN ROAD, NAN-PAO TSUN, KUEI-JEN HSIAN, TAINAN, TAIWAN, REPUBLIC OF CHINA.

Application No. 634/Cal/86 filed on August 20, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 5 Claims

A molding device, comprising :

- (a) two vertical component form boards (12, 13) each having a forming face and a base support (12c, 13c) extending horizontally at the bottom of each of said component form boards, each base support having a joint end face (12a, 13a) forming an acute angle with said forming face and a substantially horizontal top support face adjacent to said end face;
- (b) a spacer board (14) disposed between said component form boards and having a vertical forming face and a base support (14c) extending horizontally from the bottom of said spacer board, said base support of said spacer board having two diverging joint end faces (14a) abutting with and releasably connected to said joint end faces of said component boards and two substantially horizontal top support faces adjacent to said diverging joint end faces;
- (c) means (21, 22, 23) for releasably connecting said form boards to said spacer board; and
- (d) a force imparting, sliding movement mechanism operably associated with said horizontal support face of each of said component boards and said horizontal support face of said spacer board adjacent said support face of each of said component boards, said mechanism including a rack member mounted on one of said adjacent support faces, said rack member having a thick plate member having a top surface provided with rack teeth, said one support face having a recess for removably accommodating said thick plate member, said mechanism further including a mounting seat fixed to the other one of said adjacent support faces and having at least one mounting hole, a horizontal shaft removably insertable into said mounting hole, a lever connected to said shaft for turning said shaft, an eccentric member fixed to shaft, and a pawl member having one end rotatably sleeved around said eccentric member and an opposite free end to engage with said rack teeth, said pawl member being capable of swinging freely.

Compl. Specn. 17 Pages.

Drgs. 9 Sheets.

CLASS : 9D, 85-J & 108-C<sub>2</sub>

166/43

Int. Class : C 21b 1/00

#### TREATMENT VESSEL FOR TREATING MOLTEN METAL ALLOYS.

Applicant : GEORG FISCHER AKTIENGESELLSCHAFT, OF CH-8201 SCHAFFHAUSEN, SWITZERLAND

Inventors : (1) HENYCH IVO, (2) GUT KARL.

Application No. 875/Cal/86 filed on December 3, 1986

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 5 Claims

A treatment vessel for subjecting molten metal alloys to, desulphurisation treatment comprising a main treatment vessel for holding molten metal alloy to be treated and having means for

admitting desulphurisation agent, said means including an additional chamber provided within the main treatment vessel for holding a desulphurisation agent, said additional chamber being provided at the place immersible by said molten metal alloy or normally above the level of metal alloy held within the main treatment vessel and adapted to provide direct access of the molten metal alloy to the desulphurisation agent held within the additional chamber when the normal position of the main treatment vessel is altered so as to have the said additional chamber immersed in the said molten metal alloy.

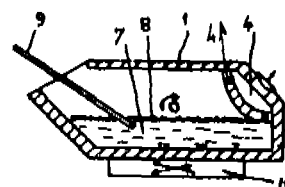


Fig. 1

Compl. Specn. 8 Pages.

Drg. 1 Sheet.

CLASS : 32F<sub>1</sub>

166744

Int. Class : CO 7D 519/00

#### A PROCESS FOR PREPARING A WATER-SOLUBLE TRI-PHENDIOXAZINE COMPOUND.

Applicant : HOECHST AKTIENGESELLSCHAFT, OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) HARTMUT SPRINGER, (2) GUNTHER SCHWAIGER AND (3) WALTER HELMLING.

Application No. 890/Cal/1986 filed on December 8, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

## 8 Claims

A process for preparing a water-soluble triphenldioxazine compound conforming to the formula (1) of the accompanying drawings wherein :

T is a substituted or unsubstituted alkyl group of 1 to 6 carbon atoms, except an ethyl group which is substituted in the  $\beta$ -position by an alkalically eliminatable substituent, which alkyl group can be additionally interrupted by hetero groups selected from groups of the formulae -O-, -S-, -NH- and -N(R<sup>1</sup>)-, where

R<sup>1</sup> is an alkyl group of 1 to 6 carbon atoms which can be substituted by substituents such as hereinbefore described or

T is an aryl group unsubstituted or substituted by substituents such as hereinbefore described,

B is an oxygen or sulfur atom or an amino group of the formula -NH- or -N(R'), in which

R' is an alkyl group of 1 to 6 carbon atoms which can be substituted (by substituents such as hereinbefore described), or

B forms together with W a direct bond;

W forms together with B a direct bond or



W is a bridge member such as hereinbefore described

R is a hydrogen atom or a substituent such as hereinbefore described

R\* is a hydrogen atom or a substituent such as hereinbefore described, or

R\* and the bivalent radical W, if it contains an amino group, or a portion of the radical W form together with the two nitrogen atoms the radical of a 5- or 6- membered heterocycle;

A is a radical of the formula (2) of the drawings in which

Z is a fluorine, bromine or chlorine atom and

Y has one of the meanings of Z or is an amino group of the formula 3(a)

in which

R<sup>1</sup> is a hydrogen atom or an alkyl group of 1 to 6 carbon atoms which can be substituted, by a substituent such as hereinbefore described, it being possible for one of the substituents also to be a fiber-reactive group, or is a cycloalkyl group having 5 to 8 carbon atoms and

R<sup>2</sup> is a hydrogen atom or an alkyl group of 1 to 6 carbon atoms which can be substituted by a substituent such as hereinbefore described, it being possible for one of the substituents also to be a fiber-reactive group, or is a cycloalkyl group having 5 to 8 carbon atoms or is an aryl group which can be substituted, it being possible for one or two of these substituents in the aryl radical also to

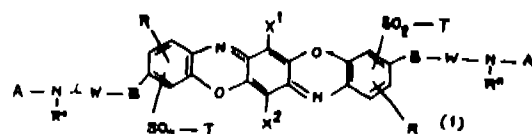
be a fiber-reactive group, or is a heterocyclic radical such as hereinbefore described, or

Y is a radical of the formula (3b)

in which R<sup>1</sup> and R<sup>2</sup> each denote a hydrogen atom or an alkyl group of 1 to 4 carbon atoms, such as the methyl or ethyl group, Z' is a fluorine or bromine atom or preferably a chlorine atom, Y' has one of the meanings of Y except the meaning of a group of the formula (3b) and W\* has the same meanings of W;

X<sup>1</sup> is a hydrogen atom or a halogen atom, a cyclo-alkyl group of 5 to 8 carbon atoms, an aralkyloxy group, an alkoxy group of 1 to 4 carbon atoms, an aryloxy group, an alkyl group of 1 to 4 carbon atoms, an aryl group, an aralkyl group, a cyano group, a carboxyl group, a carbalkoxy group of 2 to 5 carbon atoms, an arylamino group, a carbamoyl group, an N-alkylcarbamoyl group of N, N-dialkylcarbamoyl group having alkyl radical of 1 to 4 carbon atoms each, an N-arylcarbamoyl group, an alkanoylamino group of 2 to 5 carbon atoms or an aroylamino group, it being possible for the aryl radicals in these groups to be additionally substituted by 1 to 2 substituents from the group halogen, nitro, alkyl of 1 to 4 atoms, alkoxy of 1 to 4 carbon atoms, carboxy and sulfo;

X<sup>2</sup> is identical to or different from X<sup>1</sup> and has one of the meanings indicated for X<sup>1</sup>; the group -SO<sub>2</sub>-T is preferably bonded in the orthoposition relative to the group -B-W-N(R\*)-A; of the sulfo and sulfato groups which can be present in the molecule (1), the molecule (1) mandatorily contains at least one thereof, preferably at least two thereof, which process comprises reacting one molecule of a compound of the general formula (8) in which R\*, R, B, T, W, X<sup>1</sup> and X<sup>2</sup> have the above-mentioned meanings, with 2 molecules of a compound which is selected from a dihalogenotriazine compound of the general formula (9) in which Z and Y have the above-mentioned meanings.



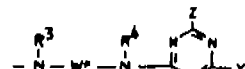
Formula (1)



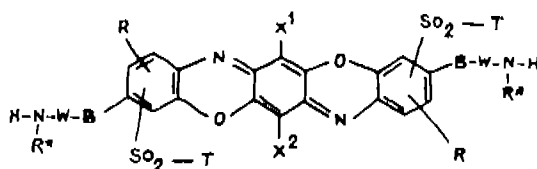
Formula (2)



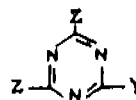
Formula (3a)



Formula (3b)



Formula (8)



Formula (9)

CLASS : 107K [XLVI(2)]

166745

Int. Class : F16K 25/00

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

A VALVE COMPONENT FOR A FRICTIONLESS GUIDED VALVE

19 Claims

Applicants : DAVID GODFREY WILLIAMS, OF 6, QUAY-SIDE, LITTLE NESTON, SOUTH WIRRAL, L64 0TB, ENGLAND, AND (2) MICHAEL ROUTLEDGE, OF THE LODGE GARDENS, KILGASK STREET, NEWPORT, ENGLAND.

Inventor : DAVID GODFREY WILLIAMS.

Application No. 937/Cal/86 filed on December 22, 1986.

Convention dated 21st December, 1985 No. 8531550, in U.K.

A composite valve plate for use in a plate-type non-return valve comprising a flat outer valve closure member (8) having a central aperture (9) and a guide member (1) locatable in said central aperture (9) and being capable of providing frictionless guidance of the valve closure member (8), with said guide member (1) being locatable within said aperture (9) by location means (4, 5, 10); characterised by the feature that the location means (4, 5) of the guide member (1) when located in the central aperture (9) lies or lie in the space defined between the planes in which the opposite surfaces of the valve closure member (8) lie.

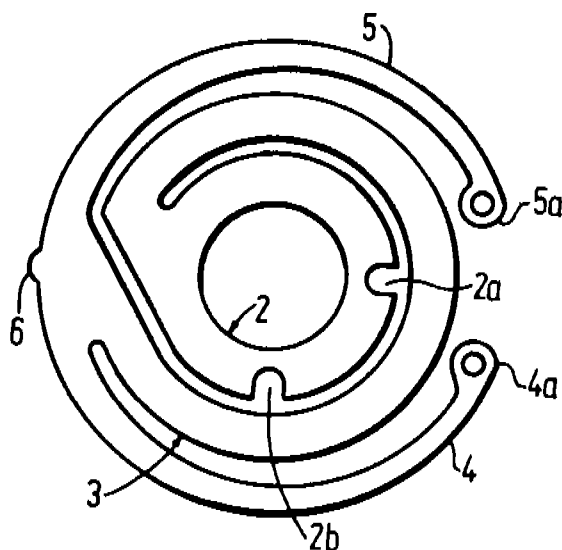


Fig. 1



Fig. 4

Compl. Specn. 17 Pages.

Drgs. 2 Sheets.

Int. Class : F 24 J 2/52

166746

**CONCAVE MIRROR ASSEMBLY AND METHOD OF MANUFACTURING SAME.**

**Applicant:** POWER KINETICS, INC., of 415 River Street, 1, New York 12180, United States of America.

**Inventors:** (1) WILLIAM EDWARD ROGERS, (2) DAVID NEWBOLD BORTON.

**Application No.** 940/Cal/1986 filed on December 23, 1986.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972)** Patent Office, Calcutta.

**27 Claims**

A method of manufacturing a concave mirror assembly constituted by a mirror element which is supported by a backing element, said backing element having a front surface and a back surface, said method comprising the steps of;

Placing the mirror element on the front surface of the backing element to support the mirror element;

spacing the mirror element from the front surface of the backing element, on either side of a first axis;

depressing a portion of the mirror element along the first axis, so as to curve the mirror element about the first axis without curving said backing element;

securing the mirror element to the backing element in the curved position; and

curving the backing element and the mirror element about a second bending axis which is orthogonal to the first axis, so that the mirror element assumes a concave shape.

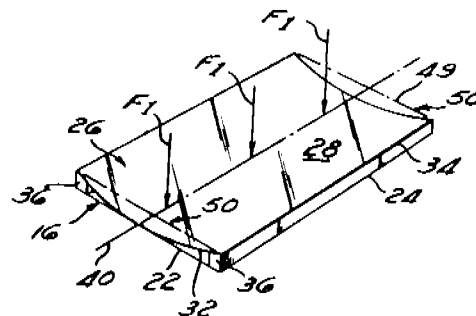


Fig. 5

Compl. specn. 23 pages

Drgs. 4 sheets.

CLASS : 8 &amp; 126. D.

166747

Int. Class : G 01 D 21/00.

**INFLAMMABLE GAS DETECTOR FOR EXPLOSIVE GAS MIXTURE.**

**Applicant:** BHANU DAS, 1/12, Dr. Panchanan Mitra Lane, Calcutta-700 085, West Bengal, India.

**Inventor:** BHANU DAS.

**Application No.** 943/Cal/1986 filed on December 24, 1986 comp. specn. left on 18-12-87.

**4 Claims**

An inflammable gas detector for explosive gas mixture comprising a cylindrical body with an open top, a series of holes provided on the cylindrical body, a pair of cylindrical copper wire gauges placed inside the said cylindrical body in an annular fashion and one above the other, a top cover of steel screw fitted on the open end of the cylindrical body wherein an electronic gas lighter is fitted on the said top cover in such a manner that the sparking tip of the gas lighter passes through the said top cover into the interior of the said cylindrical body, and an air aspirator device is fitted on the said top cover so that the tube of the aspirator passing through the said top cover enters into a small brass tank hanging from the said top cover inside the cylindrical body, said brass tank being provided with a small hole at the bottom.

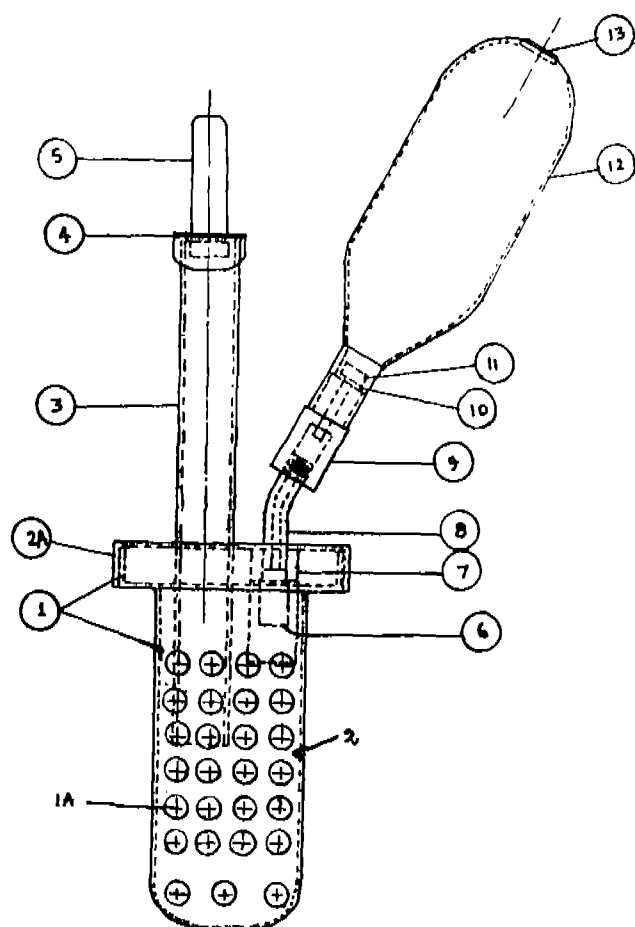


Fig. 1

Prov. specn. 4 pages

Compl. specn. 8 pages

Drgs. 5 sheets.

Drgs. 1 sheet.

CLASS : 185 A + D<sub>1</sub> + 185 C

166748

Int. Class : A 23 F 3/00, 3/12, B 26 D 5/00, 7/00.

**IMPROVED METHOD OF PROCESSING TEA LEAVES, AND TEA PROCESSOR THEREFOR.**

Applicant: TRADE &amp; INDUSTRY PRIVATE LIMITED at 19, R. N. Mukherjee Road, Calcutta-700 001, INDIA.

Inventor: 1. OM PRAKASH BAGARIA, 2. MOHLIT SEN.

Application No. 24/Cal/1987 filed on January 8, 1987.

Complete specn. left on 4th Feb., 1988.

8 Claims

A method of processing tea leaves involving subjecting tea leaves to mechanical processing for crushing/cutting, tearing and curling operations, characterised in that withered tea leaves are directly fed to mechanical processor(s) constituted by one or more pair(s) of rollers/drums of the type as herein described, without any pre-conditioning or pre-treatment of the tea leaves, and the said processor(s) is (are) so designed and arranged that the tea leaves under processing are subjected to larger processing surface area, compared to what is

conventionally known and used, the speed of rotation of the rollers/drums and the speed ratio thereof are synchronised such as herein described, with the said processing surface area, and the mechanical parameters of the processing means/features provided on the surface of the rollers/drums are selected such as herein described, in synchronisation with the overall processing surface area and the speed of rotation and speed ratio of the rollers/drums, with the resultant effect of yielding processed tea having improved characteristics, such as herein described.

Prov. specn. 8 pages.

Compl. specn. 20 pages

Compl. Drgs. 1 sheet.

Int. Class : H 02 J 3/18

166749

**APPARATUS FOR RAPID ADJUSTMENT OF NETWORK IMPEDANCE.**

Applicant: JOHN J. VITHAYATHIL, OF 3814 N. E. 136TH PLACE, PORTLAND, OREGON 97230 UNITED STATES OF AMERICA.

Inventor: JOHN J. VITHAYATHIL.

Application No. 58/Cal/1987 filed on January 19, 1987.

15 Claims

An apparatus placed in an A.C. line between an A.C. source and load for impedance adjustment in the A.C. line comprising:

a controlled inductor device serially connected in said A.C. line with said source and load directly or through a transformer said controlled inductor device including,

an inductor, and

switch means, connected in series with said inductor, for adjustably controlling the conduction period of the current passing through said inductor to thereby vary the effective reactance of said inductor, and

a parallel reactance connected in parallel with said controlled inductor device.

Compl. specn. 22 pages

Drgs. 2 sheets.

CLASS : 17 A<sub>2</sub> + 32 F<sub>3c</sub>

166750

Int. Class : C 12 P 7/06.

**PROCESS FOR THE PRODUCTION OF ETHANOL THROUGH FERMENTATION OF BEET OR CANE SUGAR MOLASSES BY MEANS OF YEAST.**

Applicant: CHEMATUR AB, OF BOX 430, S-691 27 KARLSKOGA, SWEDEN.

Inventor: CONNY THORSSON.

Application No. 60/Cal/1987 filed on January 20, 1987.

## 7 Claims

A process for the production of ethanol through fermentation of beet or cane sugar molasses by means of yeast in a fermentor (FI), in which a stream (5) of fermentation liquid with an ethanol content of 3–7% by weight and a content of fermentable material less than 2% by weight is continuously withdrawn from the fermentor, said stream (5) is separated in a centrifugal separation step (c) into a yeast enriched stream (8), which is recirculated to the fermentor (FI), and into an essentially yeast-free stream (11), which in a primary distillation step (PD) is separated into an ethanol enriched top stream (12) and a residual liquid bottom stream (13), a part of which (14) is recirculated to the fermentor (FI) and the remaining part (17) is supplied to a secondary distillation step (SD) for stripping of remaining ethanol and forming a concentrated ethanol-free stillage (20), which is discharged, characterized in that the input of process water is controlled, for example by controlling the concentration of supplied molasses substrate, so that the concentration of non-fermentable substance in the fermentor (FI) calculated as water-free substance (DS), increases from a start value in the range 5–15% by weight DS to a value in the range 20–30% by weight DS, in which range the ethanol productivity of the yeast is decreasing, whereafter the continuous fermentation and distillation with recirculation of said bottom stream (14) is subsequently continued at the last said high concentration of non-fermentable substance in the fermentor, so that the average concentration of non-fermentable substance in the fermentor during said two periods of time exceeds 20% by weight DS.

Compl. specn. 13 pages

Drg. 1 sheet.

CLASS: 68 (D + E)

166751

Int. Class: G05F 1/00.

## POWER CONTROL CIRCUIT.

Applicant: WESTINGHOUSE BRAKE AND SIGNAL COMPANY LIMITED, A BRITISH COMPANY, OF PEW HILL, CHIP-PENHAM, WILTSHIRE, UNITED KINGDOM.

Inventor: DAVID WILLIAM COWEN.

Application for Patent No. 551/Del/85 filed on 15th July, 1985.

Convention date July 30, 1984/8419373/(U.K.).

Appropriate Office for Opposition Proceedings (Rule 4, patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

## 11 Claims

A power control circuit comprising:

- (a) a bridge of first<sup>(2)</sup>, second<sup>(3)</sup>, third<sup>(4)</sup> and fourth<sup>(5)</sup> control-able switching elements, the first and third elements being diagonally opposite elements in the bridge and the second and fourth elements being diagonally opposite elements in the bridge;
- (b) a voltage supply source connected to input<sup>(6,7)</sup> terminals of the bridge;
- (c) an output transformer<sup>(10)</sup> connected to output terminals of the bridge;
- (d) first pulse width modulated control<sup>(12)</sup> means providing first and second control signals, the pulse widths of which are determined in accordance with the voltage supply level, control terminals of the first and third switching elements being connected to said first pulse width modulated control means to receive the first and second control signals respectively and the arrangement being such that the first and third switching elements are rendered conductive at the same time for first periods;
- (e) second pulse width modulated control<sup>(13)</sup> means providing third and fourth control signals, the pulse widths of which are determined in accordance with the voltage supply level, control terminals of the second and fourth switching elements being connected to said second pulse width modulated control means to receive the third and fourth control signals respectively and the arrangement being such that the second and fourth elements are rendered conductive at the same time for second periods, out of phase with respect to the first periods, the said control signals tending to maintain the output power at a substantially constant level; and
- (f) means connected to one of said input terminals of said bridge for isolating the said voltage supply from the input terminals in response to the first and fourth switching elements being conductive at the same time or the second and third switching elements being conductive at the same time.

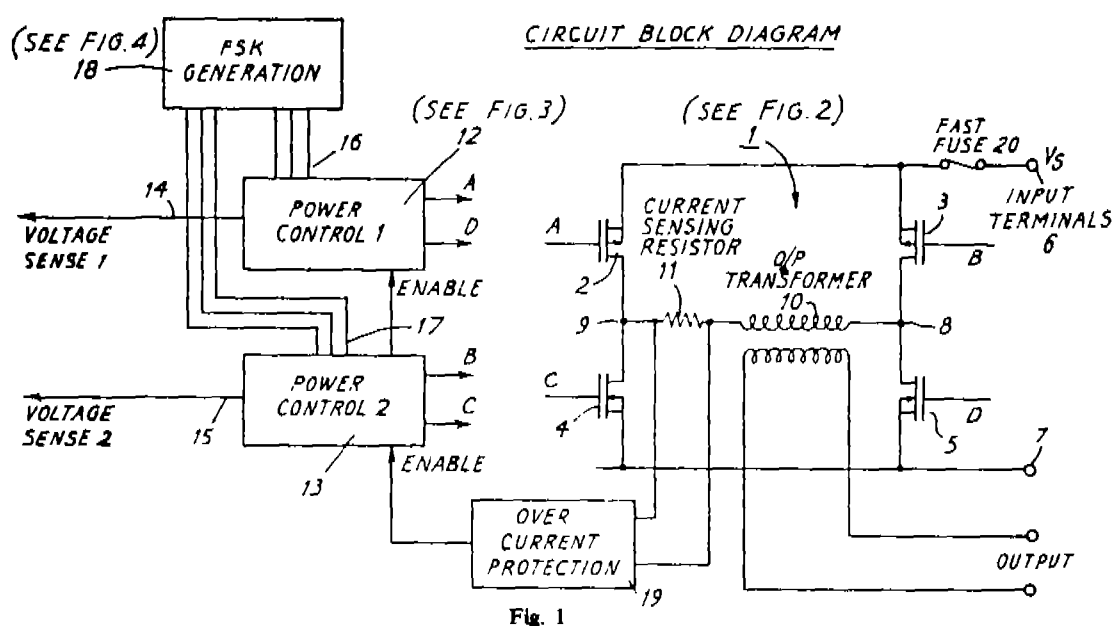


Fig. 1

Compl. specn. 13 pages

Drg 5 sheets.

Ind. Cl.: 32D

166752

Convention date November 21, 1984/PG 8224/(AUSTRALIA).

Int. Cl.<sup>4</sup>: C 01 B 25/168.**PROCESS FOR PREPARING ORGANO-METALLIC PYROPHOSPHATES.**

**Applicant:** KENRICH PETROCHEMICALS, INC A CORPORATION OF DELWARE, UNITED STATES OF AMERICA, OF 140 EAST 22ND STREET BAYONNE, NEW JERSEY 07002, USA.

**Inventors:** GERALD SUGERMAN, SALVATORE JOSEPH MONTE.

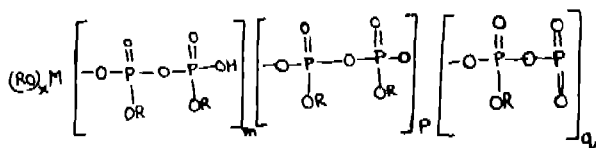
**Application for Patent No. 725/Del/85** filed on 3 September, 1985.

**Post dated to 23rd September 1985.**

**Appropriate Office for Opposition Proceedings (rule 4, patent Rules 1972), patent Office Branch, New Delhi-5.**

2 Claims

**A process for preparing organo-metallic pyrophosphates having**



Formula I

the formula I of the accompanying drawing wherein M is titanium or zirconium; R is a monovalent hydrocarbon group optionally substituted with halogen or oxygen substitutes; m is an integer from 0 to 4; x is an integer from 0 to 3; p is an integer from 0 to 2; q is an integer from 0 to 4; the sum of x and q is greater than 0; n = p + m + q; n is an integer from 1 to 4 and is than or equal to m; x + m + 2q = 4; and when x is greater than 0, q is 0; which comprises reacting an organo-metallic compound having the formula (RO)<sub>x</sub> M wherein R and M have the meaning indicated above, with from 1 to 4 moles of phosphorus pentoxide and from 0 to 4 moles of an organic hydroxyl compound having the formula ROH wherein R has the meaning indicated above.

Compl. specn. 34 pages

Drg 1 sheet.

Ind. Cl.: 56D

166753

Int. Cl.<sup>4</sup>: B01d 13/00.**A METHOD OF OSMOTIC DISTILLATION AND APPARATUS FOR CARRYING OUT THE SAME.**

**Applicant:** SYRINX RESEARCH PTY. LTD., A COMPANY INCORPORATED IN THE STATE OF QUEENSLAND, OF LEVEL 65, MLC CENTRE, SYDNEY, NEW SOUTH WALES, AUSTRALIA.

**Inventor:** MICHEL SERGE MAXIME LEFEBVRE.

**Application for Patent No. 979/Del/85** filed on 21st November, 1985.

**Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule 1972), Patent Office Branch, New Delhi-110 005.**

7 Claims

A method of osmotic distillation for the concentration of a first fluid comprising circulating said first fluid on one side of a micro-porous diffusion barrier and a second fluid on the opposite side of said diffusion barrier, said diffusion barrier is a hydrophobit micro-porous matrix, and is of tabular form one of said fluids being circulated through said tabular horrier and the after fluid around said horrier said second fluid is of a relatively higher osmotic pressure than said first fluid, so that a vapour pressure gradient is created between said two fluids on opposite side of the diffusion barrier and solvent from said first fluid is transferred through said diffusion barrier from said one side to said opposite side in a vapour state under the influence of said vapour pressure gradient.

Compl. specn. 25 pages

Drgs. 6 sheets

Ind. Cl.: 32E

166754

Int. Cl.<sup>4</sup>: C08F 2/34.

**AN IMPROVED PROCESS FOR POLYMERISATION OR COPOLYMERISATION OF ETHYLENE AND AT LEAST ONE OTHER ALPHA-OLEFIN IN THE GAS PHASE IN THE PRESENCE OF A CATALYST BASED ON CHROMIUM OXIDE.**

**Applicant:** BP CHEMICALS LIMITED, A BRITISH COMPANY, OF BELGRAVE HOUSE, 76 BUCKINGHAM PALACE ROAD, LONDON, SW1W 0SU, ENGLAND.

**Inventors:** DANIEL CLAUDE DURAND & FREDERIC ROBERT MARIE MICHEL MORTEROL.

**Application for Patent No. 1020/Del/85** filed on 3rd December, 1985.

**Appropriate Office for Opposition Proceedings (Rule 4, Patent Rule, 1972), Patent Office Branch, New Delhi-5.**

5 Claims

An improved process for polymerisation of ethylene or copolymerisation of ethylene and at least one other alpha olefin in the gas phase by bringing ethylene and optionally at least one other alpha olefin in contact, under polymerisation or copolymerisation conditions in a reactor in which polymer or the copolymer is maintained in a Fluidised bed and/or is agitated with mechanical stirring, said reactor containing a charge powder, in the presence of a catalyst comprising a chromium oxide compound associated with a granular support based on a refractory oxide and activated by thermal treatment at a temperature equal to or greater than 250°C, but below the temperature at which the granular support begins to sinter, under a non-reducing atmosphere, preferably an oxidising atmosphere, this catalyst being employed in the form of a prepolymer obtained by bringing the said catalyst into contact with ethylene and optionally at least one other alpha olefin, this process comprising a start-up operation with the charge powder and being characterised in that prior to the introduction of the prepolymer into the reactor the charge powder

used is dehydrated and thereafter subjected to a treatment lasting at least 5 minutes by contacting the said charge powder with at least one orange-aluminium compound of the formula  $AlR_nX_{3-n}$  in which R is an alkyl group comprising from 2 to 12 carbon atoms, X is a hydrogen atom or an alcoholate group and n is a whole number or a fraction comprised between 1 and 3, the quantity of organo aluminium compound used being comprised between 0.1 and 50 millimoles per kilogram of charge powder.

Compl. specn. 26 pages.

Ind. Cl. : 98 I, 206 E

166755

Int. Cl.<sup>4</sup> : F24J 3/02, H01L 1/00.

# A SYSTEM FOR THE CONTINUOUS PRODUCTION OF SEMICONDUCTORS DEVICES.

Applicant: ENERGY CONVERSION DEVICES, INC., A DELAWARE CORPORATION OF 1675 WEST MAPLE ROAD, TROY MICHIGAN 48064, UNITED STATES OF AMERICA.

Inventors: MASATSUGU IZU, TIMOTHY JOHN BARNARD, DAVID ATTILIO GATTUSO & HERBERT CHARLES OVSHINSKY.

Application for Patent No. 1056/Del/85 filed on 12th December, 1985.

Divisional to Application No. 255/Cal/82 filed on 5th March, 1982.

Ante dated to 5th March, 1982.

Appropriate Office for Opposition proceedings (Rule 4, Patent Rules, 1972), Patent Office Branch, New Delhi-5.

## 5 Claims

A system for the continuous production of semiconductor devices wherein a plurality of semiconductor layers are continuously deposited onto a moving substrate (10), said system comprising :

(a) a substrate feed chamber (14) for housing a substrate feed reel (12) to supply the substrate for deposition;

(b) a substrate take-up chamber (18) connected to said substrate feed chamber (14) for housing a substrate take-up reel (16) to collect the substrate (10) after deposition;

(c) at least three dedicated, operatively interconnected deposition chambers (28, 30, 32), at least one of the chambers (28) being dedicated for the deposition of a p-type semiconductor layer, at least one of the chambers (30) being dedicated for the deposition of an i-type amorphous semiconductor layer, and at least one of the chambers (32) being dedicated for the deposition of an n-type semiconductor layer; said deposition chambers being located between said substrate feed chamber and said substrate take up chamber;

(d) means (40, 42) for sequentially and continuously advancing the substrate (10) from the feed reel (12) in the supply chamber (14), through the deposition chambers, and onto the take-up reel (16) in the take-up chamber (18);

(e) means (98) for introducing the reaction gases, said gases including at least one semiconductor material, into each deposition chamber;

(f) isolation means (48) operatively interconnecting each pair of adjacent deposition chambers (28, 30, 32) for (1) providing a passageway through which the substrate (10) travels between each pair of adjacent chambers, and (2) substantially preventing the free flow of the reaction gases between each pair of adjacent chambers, whereby the reaction gases introduced into one chamber of the pair of adjacent deposition chambers are substantially protected from contamination by the reaction gases introduced into the adjacent chamber of the pair, the feed chamber, the take-up chamber, the at least three deposition chambers and the isolation means being at least partially evacuated, thereby isolating the entire path of travel of the substrate (10) through the deposition system from ambient conditions;

(g) decomposition means (90) in each deposition chamber receiving radio frequency energy for disassociating in a decomposition region within each respective decomposition chamber the reaction gases introduced into that deposition chamber and depositing a semiconductor layer onto the substrate the introducing means introducing the reaction gases into each deposition chamber proximate the decomposition region and including baffle means for providing a substantially uniform flow and a substantially uniform pressure of reaction gases across the entire surface of the substrate as the substrate passes through the decomposition region;

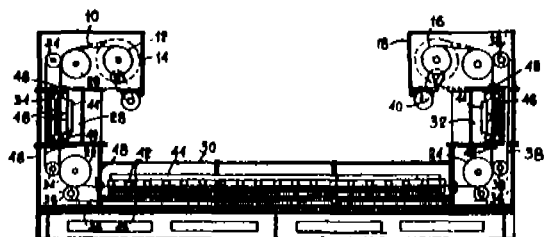
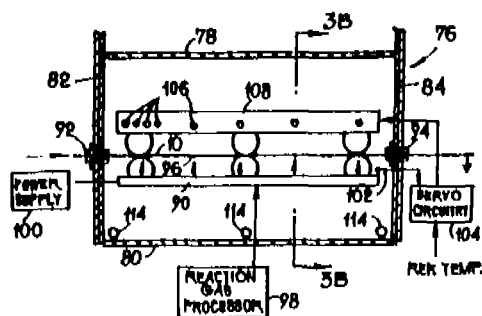
(h) an exhaust port disposed proximate the decomposition region of each deposition chamber (28, 30, 32);

(i) means (98) for uniformly withdrawing nondeposited reaction gases from the exhaust port of each deposition chamber (28, 30, 32), said withdrawing means (98) cooperating with the gas introducing means (90) and the isolation means (48) substantially to prevent nondeposited reaction gases from one chamber of a pair of deposition chambers from diffusing through the isolation means passageway (48) and contaminating the reaction gases in the adjacent chamber;

(j) means for regulating the supply of reaction gases into and from each of the deposition chambers, said reaction gases regulating means being connected to said deposition chambers (28, 30, 32);

(k) means for heating (106) and regulating (104) the temperature of said substrate (10) in each of the deposition chambers (28, 30, 32), said heating means (106) being located in said deposition chamber; and

(l) means for regulating the frequency and power supplied to the decomposition means in each of the deposition chambers, whereby the apparatus continuously deposits successive, high quality semiconductor layers onto the substrate as the substrate passes from the feed chamber, through each of the at least three interconnected deposition chambers, and into the take-up chamber, said frequency and power regulating means being connected to said deposition chambers.



Compl. Specn. 31 Pages.

Drgs. 5 Sheets.

2 Claims

Ind. Cl. : 128 A, 52 A

166756

Int. Cl.<sup>4</sup> : A61F 15/00, 15/02, B26B 13/00, 17/00.

**CUTTING APPLIANCE FOR USE IN CUTTING AVERAGE WIDTH BANDS OR STRIPS OF WOVEN, SUPER-IMPOSED FABRIC OR COMPOSITE FIBRE MATERIALS.**

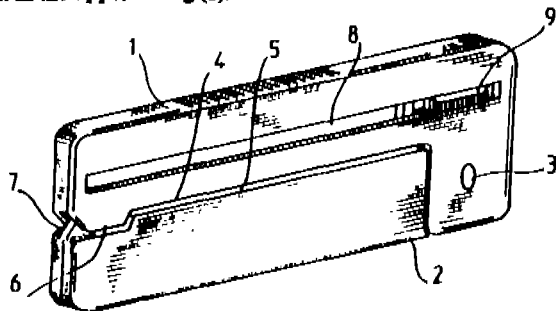
**Applicant & Inventors :** JACKIE ANDRE DE RUYTER, OF 32 RUE DE LA CIGALE-68200 MULHOUSE, FRANCE; JEAN-PIERRE DE RUYTER, OF 2 RUE DES ANEMONES-68500 GUEB-WILLER, FRANCE AND DANIEL BURGER, OF 32 RUE DE LA CIGALE-68200 MULHOUSE, FRANCE, ALL FRENCH CITIZEN.

Application for Patent No. 290/Del/86 filed on 27 March, 1986.

Appropriate Office for Opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110005.

17 Claims

Cutting appliance for use in cutting average width bands or strips of woven, superimposed fabric or composite fibre materials, characterised by a combination of two casings (1+2) serving as pincers hinged together at one end, said two casings (1+2) having jaw grips (4, 5) located on a lower (2) side of an upper (1) said casing and on an upper side of a lower (2) said casing, said jaw grips (4, 5) holding the material to be cut when said casings (1, 2) are brought together to cut a strip of material, a cutting blade (15) fixed to the lower casing (2) and acting together with a cutting cursor (9) mounted for reciprocal movement in the upper casing (1).



Compl. specn. 17 pages

Drgs 9 sheets.

Ind. Cl. : 140 A<sub>2</sub>

166757

Int. Cl.<sup>4</sup> C 10 M 135/02

**A PROCESS FOR PREPARING SULFURISED HYDROCARBYL CONTAINING COMPOUNDS.**

**Applicant :** THE LUBRIZOL CORPORATION, OF 29400 LAKELAND BOULEVARD WICKLIFFE, OHIO 44092 U.S.A., A CORPORATION OF THE STATE OF OHIO, U.S.A.

**Inventors :** KOCH FREDERICK WILLIAM, FLOYD ROBERT LEE.

Application for Patent No. : 336/Del/1986 filed on 15 April, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-5.

A process for preparing a sulfurized hydrocarbyl containing compounds the steps of reacting at a temperature in the range of 100° C to 250° C, sulfur with a hydrocarbyl selected from the group consisting of a fatty acid, a fatty acid ester of a monohydric alcohol and an aliphatic olefin containing 8 to 36 carbon atoms; continuing reacting until the hydrocarbyl is sulfurized, and isolating a sulfurized composition reaction product, characterised in that the on reaction is carried out in the presence of from 0.0001 to 5 Parts by weight of a catalyst selected from the group consisting of phosphoric acid and a salt thereof, per 100 parts by weight 06 the reactants.

Compl. Specn. 33 Pages.

Ind. Cl. : 116 G

166758

Int. Cl.<sup>4</sup> B 65 G 69/00

**APPARATUS FOR ACTUATING AND LOCKING HOPPER DOORS OF A HOPPER CAR.**

**Applicant :** AVONDALE INDUSTRIES, INC., A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, OF 277 PARK AVENUE, NEW YORK, NEW YORK 10172, UNITED STATES OF AMERICA.

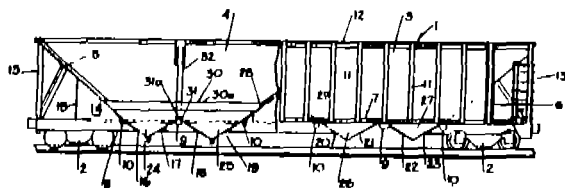
**Inventor(s) :** NORMAN STANLEY ADAMS, ROBERT EDWARD MOLLOY.

Application for Patent No. : 434/Del/1986 filed on 15 May, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 16 Claims

An apparatus for actuating and locking hopper doors of a hopper car having a frame (7, 9, 10) with a center sill (8) and a plurality of hopper doors (16-17, 18-19, 20-21, 22-23) extending transversely of said center sill (8), said hopper doors (16-23) provided singly to close a chute, the hopper doors (16-23) being in opposed pairs cooperating with hopper sheets to form a chute, and both, each hopper door comprising a pair of closure (33, 34) panels on each side of said center sill (8) and joined together by bracing members (35), said apparatus for actuating and locking comprising a shaft (77) located between the exterior surfaces of adjacent hopper doors (16-17, 18-19, 20-21, 22-23) of adjacent pairs thereof when said hopper doors are provided in pairs and adjacent the exterior surface of each single hopper door, when there are single doors present, each of said shafts (77) extending transversely of said center sill (8) and being rotatively mounted therebelow, a lever means (78) non-rotatively mounted on each of said shafts (77), each of said lever means (78) having at least an outwardly extending arm (78a) for each adjacent hopper door (16-17 etc.) and a link (86, 89) pivotally attaching said outwardly extending arm (78a) to said adjacent hopper door (16, 17 etc.) each of said links (86, 89) being adjustable in length, a segmented actuating beam (51) located within said center sill (8) and extending longitudinally thereof, each of said lever means (78) having an upstanding arm (78b) extending within said center sill (8), said upstanding arms (78b) of said lever means (78) being pivotally attached to said beam (51), said beam (51) being shiftable longitudinally between a first position wherein all of said lever means (78), links (86, 89) and hopper doors (16b 23) are maintained in an over-center, locked, door-closed position and a second position wherein all of said lever means (78), links (86, 89) and hopper doors (16b 23) are rotated over-center to a door-open position, prime mover means (45, 48, 49) connected to said beam (51) to shift said beam (51) between said first and second positions and stop means (96) on said hopper car frame (7, 9, 10) for each of said lever means (78) contacting said upstanding arm (78b) thereof to determine the over-center closed and locked position of each of said hopper doors (16-23) controlled thereby and contacting one of said other arms (78a) thereof to determine the open position of each of said hopper doors controlled thereby.



Compl. Specn. 44 Pages.

Drgs. 3 sheets

Ind. Cl.: 205 A H.

166759

Int. Cl.<sup>4</sup> B 60 C 19/00

## A RADIAL TYPE PNEUMATIC TIRE.

Applicant: B.F. GOODRICH COMPANY, A NEW YORK CORPORATION, OF 500 SOUTH MAIN STREET, AKRON, OHIO 44318, U.S.A.

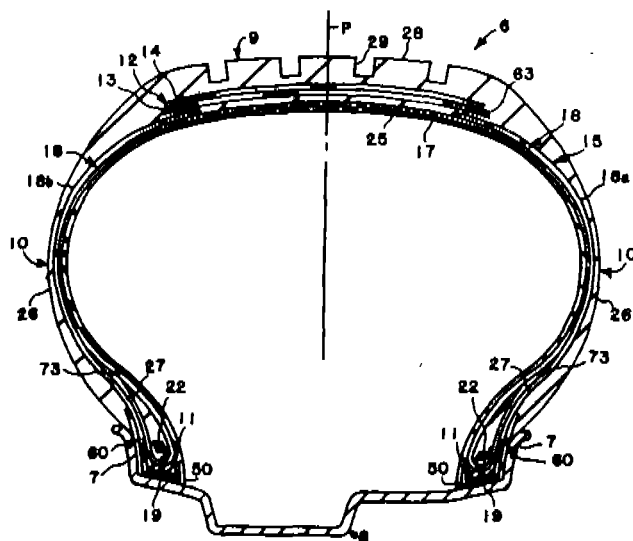
Inventor(s): SHAMIM AHMAD, KENNETH VICTOR KENREICH, JOE ALLEN POWELL.

Application for Patent No.: 483/Del/1986 filed on 2 June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-5.

## 6 Claims

A radial type pneumatic tire (6) containing a circumferential center Plane (p), said tire suitable for mounting on a wheel (8), wherein the tire interfaces with a pair of rim flanges (7) of the wheel, said tire comprising a pair of bead (11) portions; a crown (9) portion comprising a layer of tread rubber and an annular belt (12) assembly of selected width; a pair of sidewall areas (10) each composed of a predetermined thickness of sidewall rubber with a rim flange contact region; a carcass (15) of rubberized cords disposed radially to said circumferential center plane of the tire, said carcass comprising a radial inner (17) ply extending continuously from one bead portion to the other radially along said pair of sidewall areas and axially across said crown portion, a radial outer (18) ply which has two sections (18a, 18b), each section extending from axially inwardly of the edges of said belt assembly radially along a portion of each sidewall area to locations adjacent to the rim flange contact region (60) at each sidewall area.



Compl. Specn. 11 Pages.

Drgs. 2 Sheets

Ind. Cl.: 40 F

166760

Int. Cl.<sup>4</sup> B 01 D 43/00

DECONTAMINATION APPARATUS FOR CLEANING BODIES OF WATER.



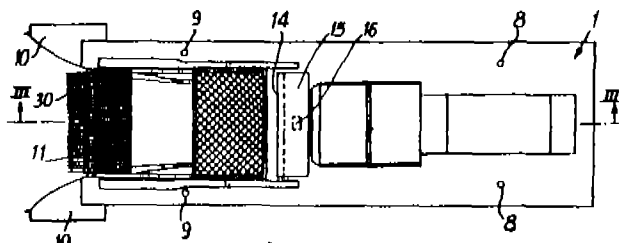
**Applicant & Inventors :** LUCIEN CHASTAN-BAGNIS, OF 21, AVENUE ISOLA BELLA-06400 CANNES, FRANCE AND ALAIN CHASTAN-BAGNIS, OF 20, AVENUE DE VALLAURIS-06400 CANNES, FRANCE BOTH FRENCH CITIZENS.

Application for Patent No. : 512/Del/1986 filed on 11th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-5.

#### 8 Claims

A decontamination apparatus for cleaning bodies of water said apparatus comprising at least one water stream channel (12) having an inlet (11) for receiving a water stream at a front end of the apparatus, at least one propeller (20) for drawing said water stream into said inlet (11) of said channel (12) and for discharging said water stream at a rear end of the apparatus, a closed decanting chamber (15) located above the surface of water surrounding the decontamination apparatus rearwardly of said inlet (11) of said water stream channel (12), a skimming channel (14) having a closed section thereof for collecting the upper part of the water stream and the floating wastes there in, an inlet (14a) of said skimming channel (14) being connected to an upper part of said water stream channel (12) at a point located beneath the surface of the water surrounding the decontamination apparatus, said skimming channel (14) extending progressively upwardly with its outlet (15b) located near the upper part of said closed decanting chamber (15) whereby floating wastes accumulate in the upper part of said chamber (15), a duct (29) for discharging floating liquid wastes from the top of said decanting chamber (15), a closed descending evacuation duct (16) for the water having an inlet thereof located in said decanting chamber (15) beneath the outlet (15b) of said skimming channel (14), an outlet (16a) of said descending evacuation duct (16) connected to said water stream channel (12) downstream from the inlet (14a) of said skimming channel (14) at a location where the water stream speed is higher than at the location of said skimming channel inlet (14a) whereby the decanting chamber (15) is kept full of liquid, the water flowing through the skimming channel (14) being continuously evacuated through said evacuation duct (16).



Figure—2

Compl. Specn. 22 Pages.

Drgs. 4 sheets

Ind. Cl. : 32 F2 (b) IX (1) + 55 E 2 + E 4 XIX (1)

166761

Int. Cl. : C 07 D—241/40, 241/42.

**A PROCESS FOR PREPARING NOVEL CHEMOTHERAPEUTICALLY ACTIVE, 5, 8-DIMETHOXY-2, 3-DI-(4'-SUBSTITUTED AMINOMETHYLPHENYL) QUINOXALINE DERIVATIVES AND PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF.**

**Applicant :** HOECHST INDIA LIMITED OF HOECHST HOUSE, NARIMAN POINT, 193, BACKBAY RECLAMATION,

5—G147 GI/90

BOMBAY 400 021. MAHARASHTRA, INDIA, AN INDIAN COMPANY

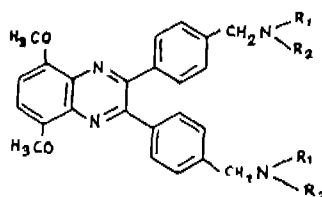
**Inventors :** DR. BINDUMADHAVAN VENUGOPALAN, DR. DEEPAK KUMAR CHATERJEE, DR. NOEL JOHN DE-SOUZA, DR. RICHARD HELMUT RUPP.

Application No. : 125/Bom/87—Filed on Apr 10, 1987  
Complete after provisional left on-Apr 20, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

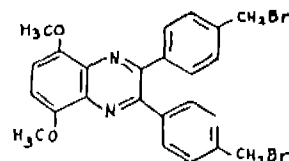
#### 2 Claims

A process for preparing novel chemotherapeutically active 5, 8-dimethoxy-2, 3-di-(4'-substituted aminomethyl-phenyl) quinoxaline derivatives of the formula I



Formula I

shown in the drawings accompanying the provisional specification wherein  $R_1$  and  $R_2$  which may be the same of different and for hydrogen, C1-C4 alkyl, for example, methyl, ethyl or propyl, hydroxy alkyl, for example, hydroxy ethyl, acyl or substituted acyl, for example, acetyl or dichloroacetyl, alkene, for example, allyl;  $R_1$  and  $R_2$  together with the nitrogen to which they are attached form a heterocycle containing one or more hetero atom(s) and is optionally substituted by an alkyl, aralkyl, carboxyalkyl or aryl which is optionally substituted with substituents such as halogen, hydroxy, alkoxy, alkyl or substituted alkyl and their pharmaceutically acceptable salts, which process comprises reacting 5, 8-dimethoxy-2, 3-di-(4-bromomethyl-phenyl) quinoxaline of the formula II



Formula II

shown in the drawings accompanying the provisional specification where a compound of the formula III



Formula III

shown in the drawings accompanying the provisional specification wherein  $R_1$  and  $R_2$  have the above meanings, in the presence of a solvent such as dioxane, tetrahydrofuran or dimethyl-formamide at 30-110°C, cooling the reaction mixture to room temperature, filtering the reaction mixture, concentrating the filtrate and subjecting the residue to column chromatography and/or crystallization and, if desired, converting the resulting compound of the formula I into its pharmaceutically acceptable salt in a known manner.

Provn. specn. 6 pages.

Drgs. 2 sheets

Compl. specn. 9 pages.

Drgs. Nil

Ind. Cl. : 170 B + D

166762

Application No. 159/Bom/1987 filed on may 20, 1987.

Int. Cl. : C 11 D—3/10, 3/20

Convention Priority Date 23rd May, 1986 U.K.

**PROCESS FOR THE PRODUCTION OF A GRANULAR SOLID SUITABLE FOR USE AS A DETERGENT POWDER OR A COMPONENT THEREOF.**

**Applicants :** HINDUSTAN LEVER LTD, HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

**Inventors :** (1) GREGORIUS JOHANNES HUIJBEN, (2) CORNELIS GERHARD VAN KRAALINGEN, (3) SEENG DJIANG LIEM AND (4) MICHELE EMILIO PAOLI

Application No. 129/Bom/1987 filed on April 13, 1987.  
U.K. Convention Date April 14, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay.

## 17 Claims

A process for the production of a granular solid suitable for use as a detergent powder or a component thereof, which includes the steps of:

- (i) preparing an aqueous slurry comprising :
  - (a) from 8 to 80% by weight of sodium carbonate,
  - (b) optionally other inorganic salts, but not more than 2% of sodium alkaline silicate, and if sodium bicarbonate is present the weight ratio of sodium bicarbonate to sodium carbonate does not exceed 1 : 3;
  - (c) optionally one or more anionic and/or nonionic detergent active compounds and/or other conventional detergent components;
- (ii) adding to the slurry, simultaneously with or later than the addition of the sodium carbonate, an acid capable of converting sodium carbonate to sodium sesquicarbonate, the acid being added in an amount of from 0.05 to 0.8 equivalents per mole of sodium carbonate;
- (iii) drying the resulting slurry to form a powder containing sodium sesquicarbonate in the form of needle-like crystals;

all percentages are based on the dried powder.

Comp. Specn. 46 pages.

Drgs. Nil

Ind. Cl. : 170 B + D—XLIII (4).

166763

Int. Cl. : C 11 D — 1/83, 3/08, 3/10.

## DETERGENT COMPOSITIONS.

**Applicant :** HINDUSTAN LEVER LIMITED, HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

**Inventors :** (1) CORNELIS GERHARD VAN KRALINGEN & (2) ROBERT ERNST NIEMANTSVERDRIET.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay-13.

## 5 Claims

A detergent composition comprising from 5 to 40% by weight of at least one synthetic detergent active material from 1 to 40% by weight of a water-insoluble aluminosilicate based on the anhydrous material, from 5% to 50% by weight of an alkali metal carbonate characterised in that it further comprises from 1% to 10% by weight of a calcium carbonate seed crystal.

Comp. Specn. 16 pages.

Drg. 1 sheet

Int. Cl. : B 60 Q—1/46.

166764

**FLASHER UNIT FOR FLASHER DIRECTION INDICATOR OF MOTOR VEHICLES.**

**Applicants :** BAJAJ AUTO LIMITED, AN INDIAN COMPANY, AKURDI, PUNE-411035, MAHARASHTRA, INDIA.

**Inventors :** DEEPAK GANGADHAR TEKMAL, ANIL CHINTAMAN KULKARNI.

Application No. 167/Bom/1987 filed on 25th May, 1987.

Complete after provisional left on 29-12-1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay

## 5 Claims

A flasher unit for a flasher direction indicator of motor vehicles, comprising a bimetallic strip and a heater coil for heating the bimetallic strip, both connected together on one side to an electric current supply terminal, two contacts on the bimetallic strip which are normally in electrical contact with an isolated contact and normally closed contact respectively, a normally open contact, the normally closed contact and the normally open contact being connected separately to two contact arms of an electrical switch having two sets of three terminals, one terminal of one of said two sets of being connected to flasher lamp on the front right side of the vehicle and the other terminal being connected to flasher lamp on the front left side, the terminals of the other set being connected to flasher lamps on the rear left and right sides respectively, the third terminal of each set being a neutral terminal, the contact arm being movable over said terminals to light flasher lamps on the right side or the left side or to put off the lamps, said bimetallic strip in its normal position being arranged to complete electric current supply circuit to the flasher lamp on the front right side or the front left side of the vehicle through the normally closed contact, depending on the position of the contact arms of the switch, and to bend or flex on being heated, breaking the circuit at said normally closed contact and completing the circuit of the rear flasher lamp on the right or the left side of the vehicle through the normally open contact, the bending or flexing of the bimetallic strip resulting in the interruption of electric current to the heater coil and cooling of the metal strip and its return to normal position thereby alternately flashing of the front and the rear flasher lamps on one or the other side of the vehicle.

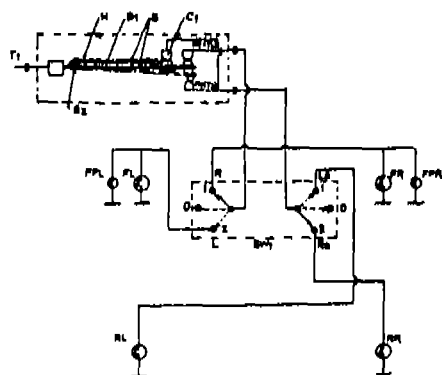


Fig. 1

Prov. specn. 10 pages.

Drgs. 2 sheets

Compl. specn. 12 sheets.

Drgs. Nil

Int. Cl. : F 23 D—14/12.

166765

## DIFFUSION FLAME SUBMERGED COMBUSTION BURNER.

Applicant : (1) DR. PHAROKH DHUNJISHAW SUNAVALA, INDIAN NATIONAL PROFESSOR, DEPARTMENT OF CHEMICAL ENGINEERING, INDIAN INSTITUTE OF TECHNOLOGY, POWAI, BOMBAY-76, STATE OF MAHARASHTRA, INDIA, (2) INDIAN INSTITUTE OF TECHNOLOGY, POWAI, BOMBAY-76, STATE OF MAHARASHTRA, INDIA, AN AUTONOMOUS BODY CORPORATE HAVING PERPETUAL SUCCESSION UNDER THE INDIAN INSTITUTE OF TECHNOLOGY ACT, 1961.

Inventor : DR. PHAROKH DHUNJISHAW SUNAVALA.

Application No. 193/Bom/1987 filed on 25th June, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Rules, 1972), Patent Office Branch, Bombay-13.

## 1 Claim

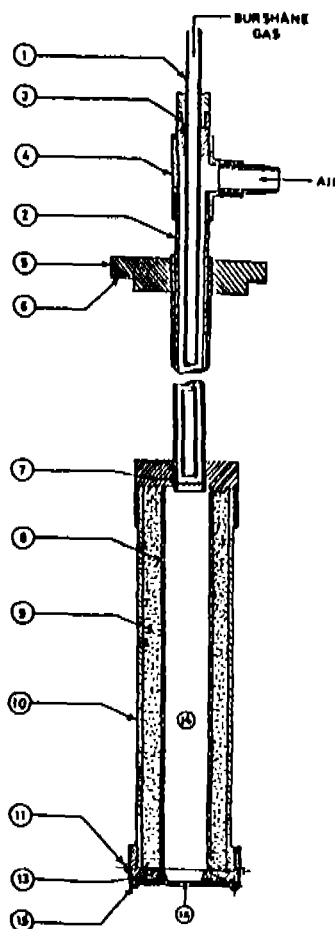
A diffusion flame submerged combustion burner consisting of a vertically placed fuel gas tube coaxially inserted into an air tube which is connected to a compressor or blower for letting air in it through a T-joint clamped onto it with a gland nut; the middle portion of the said air tube being provided, on the outside with a movable bracket which rests over the top opening of the submerged combustion tank, the lower end of the air tube and the gas tube being fitted with a wire mesh for the purpose of increasing the turbulence in the air and gas flow into the combustion chamber made of silica tube, outside of which is situated coaxially a burner tube, the space enclosed between the said silica tube and the said burner tube being stuffed with asbestos powder packing (9), the lower end of the said air tube being connected to the said burner tube, a burner cap fixed at the lower end of the said burner tube and a combustion gas distributor plate being fixed on the said burner cap and wherein the maximum internal diameter ( $D_{\max}$ ) of the fuel gas tube (1) is related to the internal diameter ( $D_c$ ) of the combustion chamber (14) and the maximum length ( $L_{\max}^J$ ) of the combustion chamber (14) by the following equations (1) and (2) :—

$$\left[ D_c^2 - (D_{\max} + 2t)^2 \right] - \left( \frac{M_a}{M_g} \right)^2 \left( \frac{W_g}{W_a} \right) D_{\max}^2 (D_{\max} + 2t) = 0 \quad \dots \dots (1)$$

$$L_{\max}^J = \frac{5D_{\max} \left( \frac{1}{C_T} + 1.5 \right) \sqrt{\frac{T_f}{T_a} \times \frac{W_a}{W_g}}}{\sqrt{1 + \left( \frac{M_a}{M_g} \right)^2 \left( \frac{W_g}{W_a} \right) \frac{D_{\max}^2}{[D_c^2 - (D_{\max} + 2t)^2]}} \quad \dots \dots (2)$$

where

- $D_c$  = Internal diameter of the combustion chamber in (cm.)
- $D_{\max}$  = Maximum internal diameter of the fuel gas tube corresponding to  $L_{\max}^J$  in (cm.)
- $L_{\max}^J$  = Length of combustion chamber which is equal to the maximum flame length of jet enclosed in the combustion chamber in (cm.)
- $M_a$  = Mass flow rate of air in (g/s)
- $M_g$  = Mass flow rate of gas in (g/s)
- $t$  = Wall thickness of fuel gas tube in (cm.)
- $T_a$  = Temperature of air in (K)
- $T_f$  = Flame temperature in (K)
- $W_a$  = Molecular weight of air
- $W_g$  = Molecular weight of gas.



Compl. Specn. 12 Pages.

Drg. 1 Sheet.

Ind. Cl.: 95 C [XLIII (2)]

166766

Int. Cl.: B 23 Q 3/06

**IMPROVED WORK-PIECE OR JOB SIDE CLAMPING DEVICE.**

Applicant & Inventor: SATISH RAJARAM GAMBHIR, C/o MR. P.J. SALVI, 'PRAVAS' PLOT NO. 228/2 A, BEHIND ASHOK TALKIES, PIMPRI WAGHERE, PUNE-411 017. MAHARASHTRA, INDIA.

Application No.: 269/Bom/87 filed on 25 Aug. 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay.

**1 Claim**

An improved work-piece or job side clamping device comprising a stationary unit and a clamping unit, the said stationary unit consists of a block having two vertical holes to accommodate two Tee bolts with nuts and washers for fixing stationary unit on machine by anchoring the Tee end of the said bolts in to the slot of machine table and a contact jaw is fixed to the said block, the said clamping unit consists of a body and a bottom plate both having two vertical holes to accommodate another set of two Tee bolts with nuts and washers for fixing the clamping unit on the machine; the said body has third vertical hole to accommodate a clamping stud with nut and washer for clamping and declamping of the job, the said body has one cross hole to accommodate one pin and another oval shaped cross hole to accommodate another pin with diametrically tapped hole at centre in which the said clamping stud is engaged through the said third hole of the body; a clamping arm fixed with clamping jaw has a vertically hollow recess to accommodate the said body and the said clamping arm has two cross holes to accommodate the said pin said tapped pin, the arrangement is such that the said pin and said two pins are assembled through the cross holes of clamping arm and body; the clamping arm along with clamping jaw rotates on the pin while tapped pin moves vertically up and down, two springs are placed between the said body and clamping arm, the said stationary unit and the said clamping unit is conveniently fixed on machine table by tightening the said Tee bolts close to the job and clamping stud is tightened there by tapped pin moves upwards and clamping arm along with clamping jaw rotates on the pin in anticlockwise direction towards the job and clamps the job between the contact jaw clamping jaw and upon loosening the clamping stud clamping arm rotates on the pin along with clamping jaw in clockwise direction away from the job due to spring force to effect quick declamping.

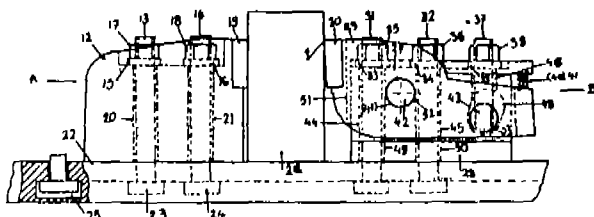


Fig. 4B

Compl. Specn. 8 pages.

Drgs. 4 sheets.

Ind. Cl.: 160 A [II (3)], 134 A, [I II VI]

166767

Int. Cl.: B 62 D 43/08

**A TWO WHEELER MOTOR VEHICLE WITH BOX AT FRONT FOR SPARE WHEEL.**

Applicant & Inventors: BAJAJ AUTO LTD., GAURI PRAKASH AGARWAL, SATISH BAPURAO BHALERAO, SATISH MADHUKAR GOKHLE.

Application No. 296/Bom/87 filed on 21 September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay-13.

**1 Claim**

A two-wheeler motor vehicle such as a motor scooter, having a box or casing fixed to the front side of the apron or front shield, which includes a cover, and a bracket fixed to the front side of the steering within the box, tube housing said bracket comprising two parallel plates and a support plate fixed to the front edges of said parallel plates and bolts for fixing a spare wheel to the support plate, accommodated in holes in said front plate and nuts for securing the bolts.

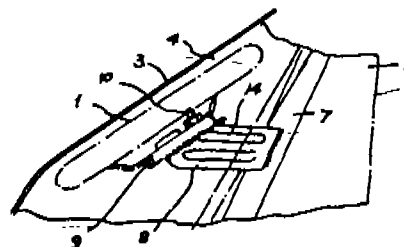


Fig. 3

Compl. Specn. 10 pages.

Drgs. 3 sheets.

Ind. Cl.: 113 G XXV (4)

166768

Int. Cl.: G 05 D 25/00.

**AN IMPROVED HIGH BAY TUBE LIGHTS FITTINGS SYSTEM.**

Applicant & Inventor: SHIRISH BHAILAL PATEL AN INDIAN NATIONAL OF NANDA DEEP 2A M L DAHANUKAR MARG, BOMBAY-400 026 MAHARASHTRA, INDIA.

Application No.: 305/Bom/87 filed on 30 September, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay.

**3 Claims**

An improved high bay tube light fitting system comprising a top plate having a central opening, a bottom plate of the same size fitted apart in relationship, to the top plate with the help of screws or nut bolts or the like means, a bracket having one or more arms fixed to the said top plate for hanging the said system to the ceiling of high bay factory or workshop or the like place, a plurality of tube light fittings—each consisting of hollow rectangular tubing or channel mounted with electric tube, a choke and a starter, electrically connected together and radially fixed with the help of screws or like means, having one end in between the said top and bottom plates to form a cluster for easy accessibility and maintenance.

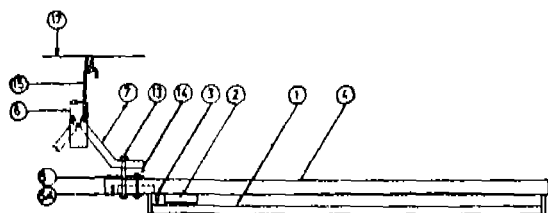


Fig. 2

Compl. Specn. 6 pages.

Drg. 1 sheet.

Ind. Cl.: 164 A [II (3)]

166769

Int. Cl.: C 02 F-3/00, 3/16, 3/24, 7/00, 9/00

**AN IMPROVED SHOCK WAVE AERATOR FOR WASTE WATER TREATMENT.**

Applicant & Inventor: CHANDRAKANT SHANKERLAL SHAH, 1, PROFESSORS' BLOCKS, VALLABH VIDYANAGAR-388 120 (GUJARAT), INDIA.

Application No.: 317/Bom/87 filed on 12 Oct. 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay.

**2 Claims**

An improved shock wave aerator for waste water treatment comprising of waste water inlet pipe having a primary nozzle and a mixing chamber provided at the end of the waste water inlet pipe, the said primary nozzle opening into the said mixing chamber and an air pipe is provided to the side of the said mixing chamber; a secondary nozzle co-axially provided to the mixing chamber at the bottom end of the mixing chamber; a mixing tube attached to the said secondary nozzle; the arrangement being such that the waste water and air mixture after passing through the secondary nozzle reaches to a sonic velocity of MACH No. 1 (i.e. velocity of sound) and creates shock waves in the mixing tube.

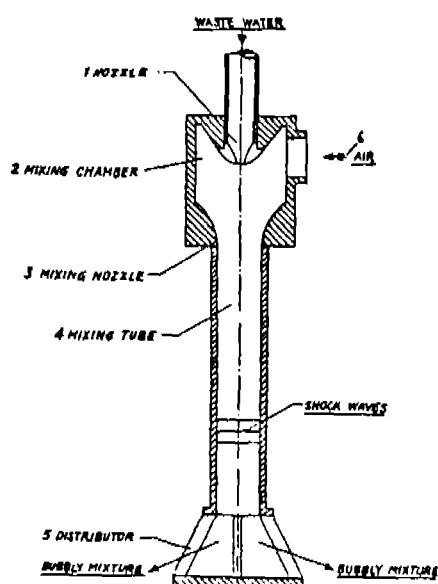


Fig. 1 SW AERATOR

Compl. Specn. 6 pages.

Drg. 1 sheet.

Ind. Cl.: 20 B [XLII (2),  
76 H LXIV (4)  
179 E XL (6)]

166770

Int. Cl.: B 65 D—53/06.

**AN IMPROVED SEAL.**

Applicant & Inventor: JIMMY SORAB CANTEENWALLA NO. 5, CAMA BLDG. CAMA ROAD, ANDHERI (WEST), BOMBAY-400 059.

Application No.: 232/Bom/1988 filed on Aug. 17, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

**2 Claims**

An improved seal comprising:

- (i) a flat rectangular receptacle with a closed bottom but an open mouth having a pair of downwardly inclined teeth in the mid-section of the said receptacle one each on its two narrow sides, and at the bottom of the said receptacle there is provided at its centre a short verticle wedge whose incline plane/s face the aforesaid two narrow sides of the receptacle;
- (ii) a flat insert, integrally connected to the aforesaid receptacle by a cord, the said insert having at its top end a capping and an arrow shaped lower end, vertically slit up the centre forming two barbs which have a lateral springing movement.

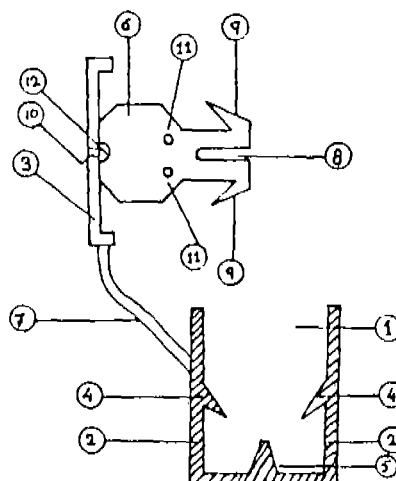


Fig. 2

Compl. Specn. 8 pages.

Drg. 1 sheet.

Ind. Cl.: 105 C

166771

Int. Cl.: G 01 L 7/00

**A MULTI STRAIN GAUGE FOR MEASURING PORE WATER.**

Applicant: COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

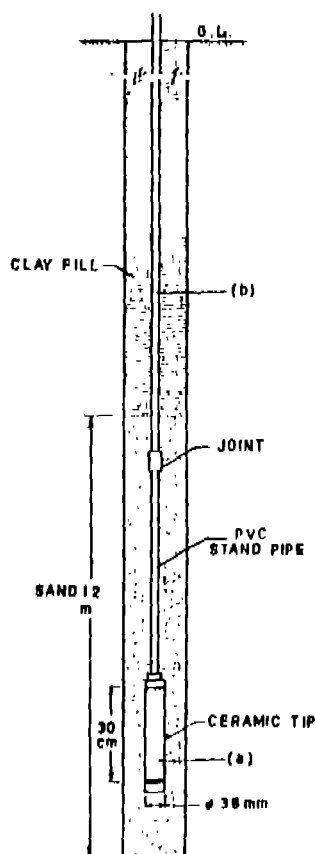
Inventor(s): TOPUR KRISHNA SWAMY NATARAJAN, BALRAJ MALHOTRA, SATISH KUMAR BHASKAR & SEEVARAM RANGANATHAN VIJAYARAGHAVAN.

Application for Patent No.: 515/Del/1986 filed on 12th June, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110005.

### 5 Claims

A multi-strain gauge for measuring pore water pressure which comprises a probe (1) having its lower portion tapered and having a cylindrical top provided with a cap, the tapered portion is also provided with a slanting portion, perforations (2) being connected to a central pipe, the pipe being joined at the top to a first perspex block (3) having a concave cavity where rubber membrane (4) is provided, the first strain gauge (5) having two terminals (6) and being positioned on the rubber membrane for the measurement of pore water pressure in the lower range, second perspex block (7) being positioned separately from the first perspex block and joined together, the second perspex block having a cavity and covered with a thin metallic foil (8) over which a second strain gauge having two terminals (10) being positioned for measurement of the pore water pressure in the higher range, the terminals of the first and the second strain gauges pass through an aperture provided at the top of the strain gauge for connection to a strain indicator.



Provn. Specn. 7 Pages.

Compl. Specn. 10 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 85 L

166772

Int. Cl.4: F 27 D 1/00, 3/00, 15/00.

### A RICE HUSK FURNACE.

Applicant & Inventor: GIAN PARKASH BHAMBRI, AN INDIAN NATIONAL OF 7-FATEH COLONY, NEAR A.C. CINEMA, PATIALA-147001, INDIA.

Application of Patent No.: 525/Del/1986 filed on 13 June, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110005.

### 5 Claims

A rice husk furnace comprising a shell/housing (A), a combustion chamber (D) provided within said shell, a hopper (B) for introduction of rice husk into said combustion chamber (D), a primary air inlet (G), connected to said hopper at its lower end, secondary air inlet means (E5) provided with said combustion chamber for supplying air to said combustion chamber and to a discharge chamber provided below said combustion chamber within said shell, said discharge chamber being in flow communication with the said combustion chamber and having a first compartment (G1) for ash and a second compartment (G2) for the passage of the ignited volatiles, said second compartment being in flow communication with a flue gas outlet (J) provided in the side of the said shell next to the second compartment.

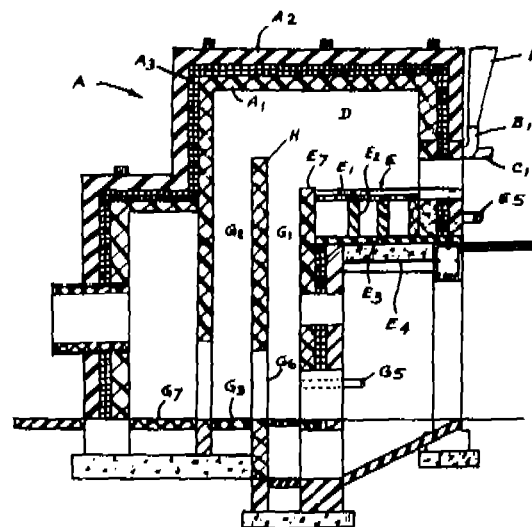


Fig. 1

Compl. Specn. 10 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 132 C/D

166773

Int. Cl.4: B 01 F 7/00

Title: "APPARATUS FOR MIXING A LIQUID OR LIQUID SUSPENSION MEDIUM CONTAINED IN A VESSEL".

Applicant: GENERAL SIGNAL CORPORATION, A CORPORATION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, U.S.A., OF HIGH RIDGE PARK, P.O. BOX 10010, STAMFORD, CONNECTICUT 06904, UNITED STATES OF AMERICA.

Inventors: RONALD NORMAN SALZMAN & KEITH TENNESSEE McDERMOTT.

Application for Patent No.: 528/Del/1986 filed on 16th June, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110005.

#### 48 Claims

Apparatus for mixing a liquid or liquid suspension medium contained in a vessel (10), the apparatus comprising a composite shaft (20) of fibrous and plastic materials, an impeller (24) having a hub (32) and blades (26, 28, 30) also of a composite fibrous and plastic materials, said blades (26, 28, 30) extending from bases thereon connected to said hub to tips thereof, said blades having a stiffness increasing from the tip to the base for counteracting flexure due to reaction loads of said medium against said blades (26, 28, 30) as said impeller (24) rotates, said hub (32) being disposed on a mounting portion (22) of said shaft (20), and means (38, 41) assembling said hub (32) to said shaft (20) and for locking the hub (32) and said shaft (20) to each other against thrust in a direction axially of said shaft (20) and torque in a direction around said shaft (20) due to said reaction loads and while distributing said thrust and torque over said mounting portion (22).

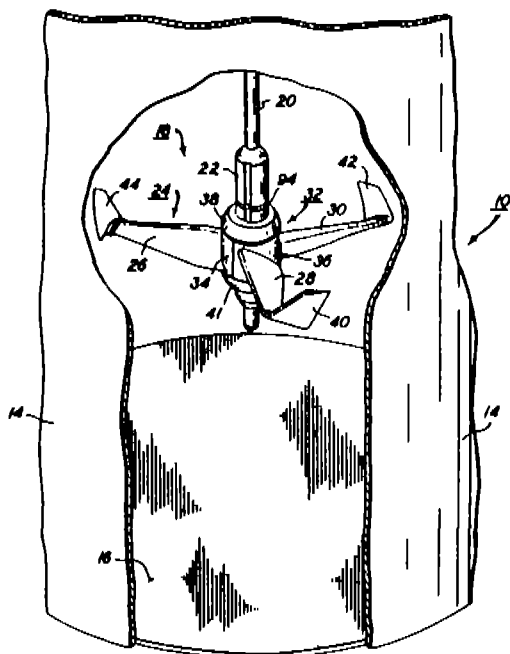


Fig. 1

Compl. Specn. 33 Pages.

Drgs. 8 Sheets.

Ind. Cl.: 40 B [IV(I)]

166774

Int. Cl.<sup>4</sup>: C 08 4/00, 4/16 B 01 J 21/06

#### A METHOD FOR PREPARING AN OLEFIN POLYMERIZATION SUPPORTED CATALYST.

Applicant: EXXON CHEMICAL PATENTS INC, A CORPORATION OF DELAWARE, UNITED STATES OF AMERICA, CARRYING ON BUSINESS AS A COMPANY FOR THE HOLDING OF PATENT AND GRANTING LICENSES THEREUNDER, AND TECHNICAL DEVELOPMENT AND RESEARCH WORK

AT 200 PARK AVENUE FLORHAM PARK, NEW JERSEY 07932 UNITED STATES OF AMERICA.

Inventor: HOWARD CURTIS WELBORN, JR.

Application for Patent No.: 539/Del/1986, filed on 18th June, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110005.

#### 9 Claims

A method of preparing an olefin polymerization supported catalyst comprising a support which is a porous inorganic metal oxide of a Group 2a, 3a, 4a or 4b metal and the reaction product of at least one metallocene of a metal of Group 4b, 5b and 6b of the Periodic Table and an alumoxane, comprising adding to a slurry of the support in an inert hydrocarbon solvent an alumoxane in an inert hydrocarbon solvent and a metallocene, the molar ratio of alumoxane to metallocene based on aluminum and metal being in the range of 100:1 to about 1:1.

Compl. Specn. 24 pages.

Ind. Cl.: 132 B<sub>1</sub>

166775

Int. Cl.<sup>4</sup>: B 01 J 2/00, 12/26.

#### IMPROVED APPARATUS FOR EFFECTING ACCURATELY IN LINE AND CONTINUOUSLY THE WEIGHT FEEDING OF GRANULATED OR PULVERULENT PRODUCTS.

Applicant: SOCIETE CHIMIQUE DES CHARBONNAGES S.A., TOUR AURORE, PLACE DES REFLETS, F-92080 PARIS LA DEFENSE CEDEX 5, FRANCE., A FRENCH COMPANY.

Inventor: SICHET JEAN-LUC.

Application for Patent No.: 546/Del/1986 filed on 24th June, 1986.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110005.

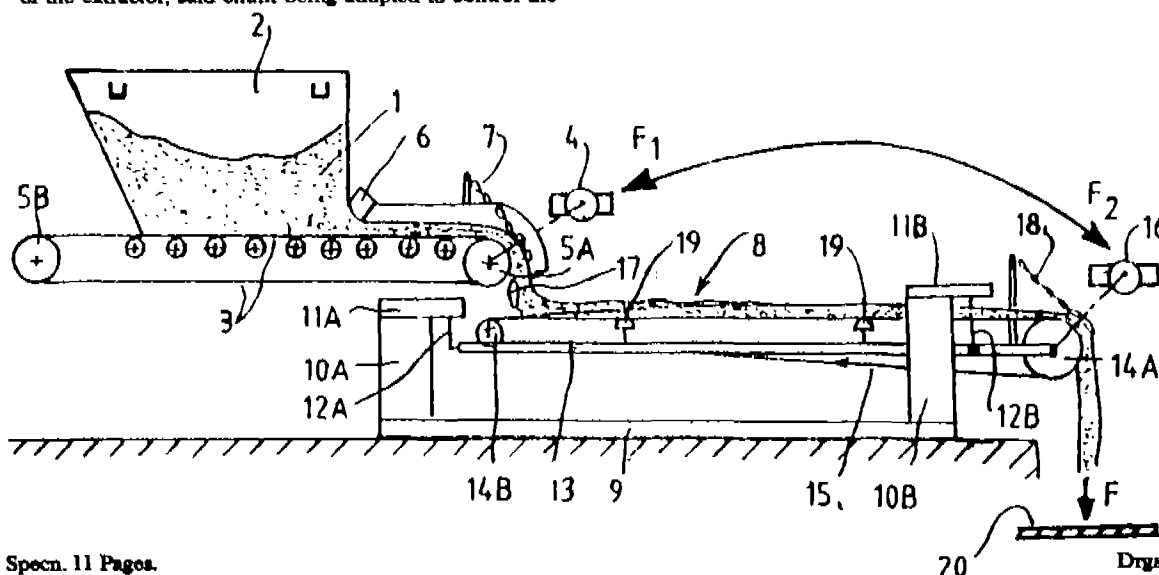
#### 8 Claims

Improved apparatus for effecting accurately in line and continuously the feeding by weight of granulated or pulverulent product having two separated endless belts for extracting and dispensing said products characterized in that said apparatus comprises in combination:

- a hopper (2) for storing the product to be weighed under which is arranged an endless belt (3) on two supports drums, one of said drums (5A, 5B) being driven at a variable speed by a motor reduction gear (4);
- a dispenser unit (8) below and in line with the endless belt of the extractor, having a fixed T-shaped support frame (9) provided at its ends three pillars (10A, 10B, 10C) supporting three strain gauge type weight indicators (11A, 11B, 11C) provided with flexible suspension (12A, 12B, 12C) an ultralight tubular frame (13), an endless belt around drums supported by said frame (13), one of said drums (14A) being driven at variable speed by a motor-reduction gear unit (16);

— an electronic control chain with two known dighed computers and the ancillary equipment the endless belt of the dispenser and the motor gear unit (4) of the endless belt (3) of the extractor, said chain being adapted to control the

speed of the endless belt of the extractor depending upon the measurement of the instantaneous load of product distributed on the dispenser belt (15).



Compl. Specn. 11 Pages.

Drgs. 2 Sheets.

Ind. Cl.: 55 A

166776

Int. Cl.<sup>4</sup>: A 23 B 9/00

Applicant: IMPERIAL CHEMICAL INDUSTRIES PLC, A BRITISH COMPANY, OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON, SW 1P 3JF ENGLAND.

A PROCESS FOR PREPARING A BIOCIDIC COMPOSITION HAVING ENHANCED STORAGE STABLE AND ANTIFREEZE PROPERTIES.

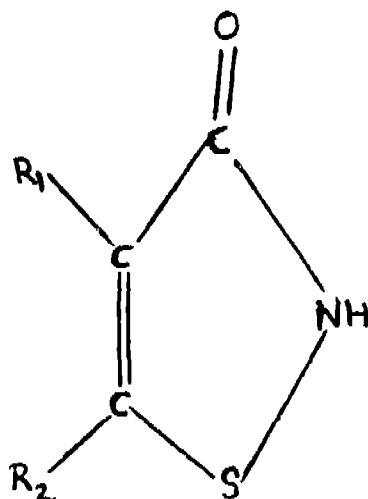
Inventor: BRYAN STUART BACKHOUSE.

Application Patent No.: 611/Del/86 filed on 10th July, 1986  
Convention date 10th July, 1985/8517478 (U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-5.

4 Claims

A process for preparing a biocidic composition having enhanced storage stable and antifreeze properties, said process comprises adding urea to a basic aqueous solution comprising a N-unsubstituted isothiazolin-3-one of formula I of the drawing, the urea being added in an



Formula I

amount of up to 40% by weight of the solution preferably in the range of 18 to 30% by weight of solution where in R<sub>1</sub> and R<sub>2</sub> are independently hydrogen, benzyl, C<sub>1</sub> to C<sub>4</sub> alkyl, aryl, halogen or R<sub>1</sub> and R<sub>2</sub> taken together with the carbon atoms to which they were attached form a mono-unsaturated cyclo-alkyl ring or a benzene ring wherein the ring is optionally substituted on one or more of the ring carbon atoms with one or more halogen atoms, nitro-groups or C<sub>1</sub> to C<sub>4</sub> alkyl or alkoxy groups.

Compl. Specn. 10 Pages.

Drg. 1 Sheet.

Ind. Cl.: 107 F

166777

Int. Cl.<sup>4</sup>: F 02 B 67/00 & 67/02

MAGNETICALLY TRIGGERED IGNITION DISTRIBUTOR FOR INTERNAL COMBUSTION ENGINES.

Applicant: DUCELLIER ET CIE, OF 3/5, VOIE FELIX EBOUE, 94000 CRETEIL, FRANCE, A FRENCH COMPANY.

Inventors: PIERRE HERITIER-BEST & DENIS PLANTIN.

Application for Patent No.: 621/Del/86 filed on 14th July, 1986.

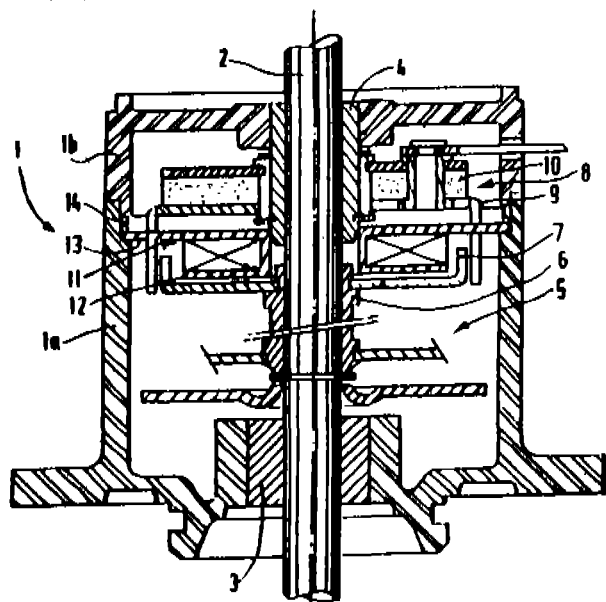
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office, Branch, New Delhi-110005.

10 Claims

Magnetically triggered ignition distributor for internal combustion engines, said ignition distributor comprising a rotor (5) driven by a main shaft (2) of the distributor, said rotor having a sleeve (6) on which is fixed a polar disc (7) having on its circumference teeth, a stator (8) in magnetic contact with a permanent magnet (10) of annular shape positioned concentrically with the distributor shaft (2) and stator (8) in front of teeth (9) a coil (11) located between the polar elements of the rotor (5) and carried by a spool (12), the base (13) of said spool being held between two support journals (1a, 1b) making up the distributor casing, said coil (11) being electrically connected to a connector (15) and fulfilling the function of grommet for passing the wire through the wall of one of the said support journals and held on this wall, characterised in that an elastic spacer ring (14) is provided



along the base (13) of the spool (12), which maintains under pressure said base carrying the coil and held between the two support journals of the casing of the distributor, said elastic spacer ring (14) having on at least one of its peripheral edges a number of equidistant elastic teeth (14a).



Compl. Specn. 9 Pages.

Drgs. 3 Sheets.

Ind. Cl.: 134D

166778

Int. Cl.<sup>4</sup>: B6 2D 1/00, 11/20.

# A FAST MOVING VEHICLE EQUIPPED WITH A SELF-GUIDING MECHANISM.

Applicant: S.A. CONSTRUCTIONS FERROVIAIRES AT METALLIQUES, A BELGIAN COMPANY, OF RUE ROYALE, 39-1000 BRUXELLES, BELGIUM.

Inventor: PAUL LENSSEN.

Application for patent No. 639/Del/86 filed on 17th July, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

## 5 Claims

A fast moving vehicle equipped with steering wheels (4) connected to either ends of a guiding axle (2), said wheels (4) which may be the driving wheels of the vehicle being provided with pneumatic tyres said vehicle being equipped with a self-guiding mechanism comprising first and second sets of arms (10, 10') extending longitudinally in the direction of movement of the vehicle and longitudinally in a direction opposite to the direction of movement of the vehicle respectively, one end of each of said sets of arms (10, 10') being attached to a turret (14) mounted about a substantially vertical pivot (15) provided on said guiding axle (2), said turret (14) also being connected to at least one coupling rod (18) articulated to a guiding lever (6) for one of said steering wheels (4), said guiding lever (6) being connected to said guiding axle (2), said one ends of said arms (10, 10') being attached to said turret (14) through the mounting thereof about respective horizontal axes (11, 11') of a pair of cross-members (12, 12') which are in turn

mounted about substantially vertical pivots (13, 13') on said turret (14) whereby said arms (10, 10') are capable of oscillation in a vertical plane about said substantially horizontal axes (11, 11') the connection between said first set of arms (10) and said turret (14) being more rigid than the connection between said second set of arms (10') and said turret (14), the opposite ends of each of said arms (10, 10') supporting a guide wheel (7, 7') adopted for engagement with a rail (8) characterised in that said guide wheel is connected to the ends of said arms (10, 10') by means of a mechanical decoupling device as herein described which is capable of providing an additional degree of lateral clearance or play between said arms (10, 10') and said rail (8) beyond the predetermined turning values imposed by said rail (8) whereby said turret (14) is caused to rotate about said substantially vertical pivot (15) providing on said guiding axle (2) and the steering wheels (4) are afforded the freedom of being deflected through an angle relative to said predetermined turning values thereby eliminating oscillating phenomena, e.g. periodic shimmy, in the steering wheels (4).

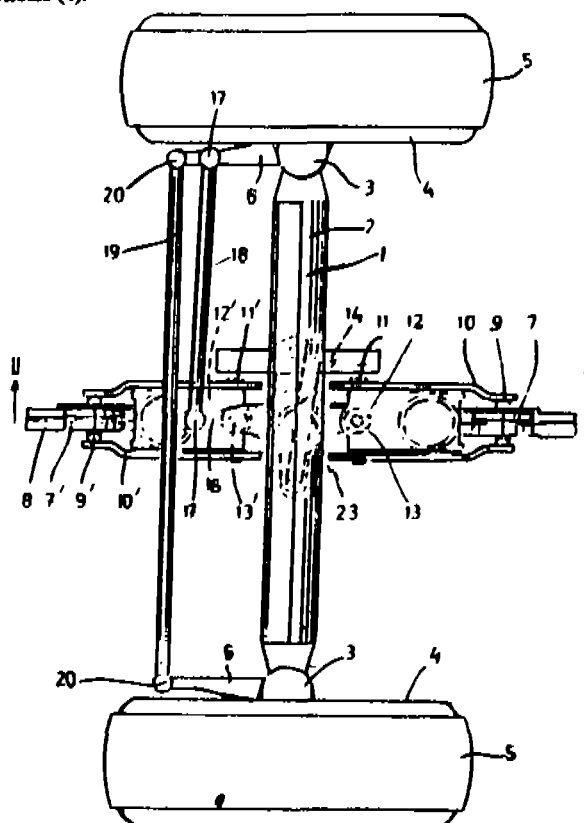


Fig. 1

Compl. Specn. 18 Pages

Drgs. 7 Sheets.

Ind. Cl.: 140 A<sub>1</sub>

166779

Int. Cl.<sup>4</sup>: C10M 125/24.

# A COMPOSITION FOR USE AS FUNCTIONAL FLUIDS HAVING ANTI-WEAR AND HIGH PRESSURE PROPERTIES.

Applicant: THE LUBRIZOL CORPORATION, OF 29400 LAKELAND BLVD. WICKLIFFE, OHIO 44092 U.S.A., A CORPORATION OF THE STATE OF OHIO, U.S.A.

Inventor: JOHN WESLEY FORSBERG.

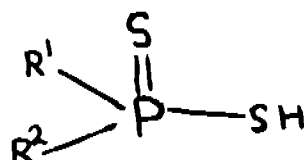
Application for Patent No. 707/Del/86 filed on 4th August, 1986.

Divisional to Application No. 24/Del/84 filed on 6th January, 1984. Ante dated to 6th January, 1984.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

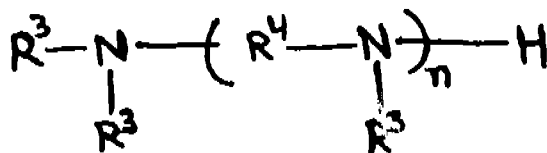
#### 9 Claims

A composition for use as functional fluids having anti-wear and extreme pressure properties comprising a continuous aqueous phase, of (A) at least one phosphorus acid/amine salt said salt being the reaction product of at least one dithiophosphorus acid compound of the formula I of the accompanying drawing wherein  $R^1$  and  $R^2$



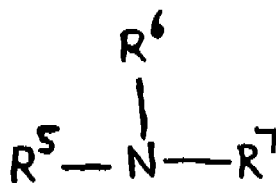
#### Formula I

are individually selected from the group consisting of hydrocarbyl radicals containing from 1 to 30 carbon atoms and hydrocarbyloxy compounds containing from 1 to 30 carbon atoms and at least one amino compound selected from the group consisting of cyclic polyamines, alkylene polyamines of the general formula II of the accompanying drawing.



#### Formula II

cyclic monoamines and monoamines of the formula III



#### Formula III

of the accompanying drawings wherein each of  $R^3$ ,  $R^4$  and  $R^7$  is individually selected from the group consisting of hydrogen atoms, hydrocarbyl radicals containing from 1 to 40 carbon atoms and hydroxy-substituted hydrocarbyl radicals containing from 1 to 40 carbon atoms provided however that when the amino compound is a monoamine corresponding to the formula III of the drawing at least one of  $R^3$ ,  $R^4$  and  $R^7$  is said hydrocarbyl or hydroxy substituted hydrocarbyl radicals,  $R^4$  is a divalent hydrocarbyl radical containing from 1 to 18 carbon atoms and  $n$  is an integer ranging from 1 to 10 and (B) at least one surface active agent selected from the group consisting of emulsifiers as herein described, surfactants as herein described and detergents as herein described.

Compl. Specn. 35 Pages.

Drg. 1 Sheet.

Ind. Cl.: 85H

166780

Int. Cl.: F27B 1/00.

#### A ROTARY GRATE FOR USE IN A VERTICAL SHAFT KILN.

Applicant: NATIONAL COUNCIL FOR CEMENT AND BUILDING MATERIALS, M-10, SOUTH EXTENSION, PART-II, RING ROAD, NEW DELHI-49. (A SOCIETY REGISTERED UNDER THE SOCIETIES REGISTRATION ACT 1860).

Inventors: HOSAGRAHARA CHANDRASEKARAIH VESVARAYA, SUSHANTA CHATTERJEE, SINHESHWAR SINHA, AMALESH MANNA.

Application for Patent No. 722/Del/86 filed on 8 August, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, New Delhi-110005.

#### 5 Claims

A rotary grate for use in a vertical shaft kiln comprising a rotatable shaft (S) having a hub (H), a frame held to said hub, said frame (E) adapted to support a rotary grate (F) characterised in that the said grate has a conical section extending from the base of said conical section (P) into a flat section (P<sub>2</sub>), said conical section (P<sub>1</sub>), having a plurality of plates (R), each plate being provided in an off-set relationship to each other.

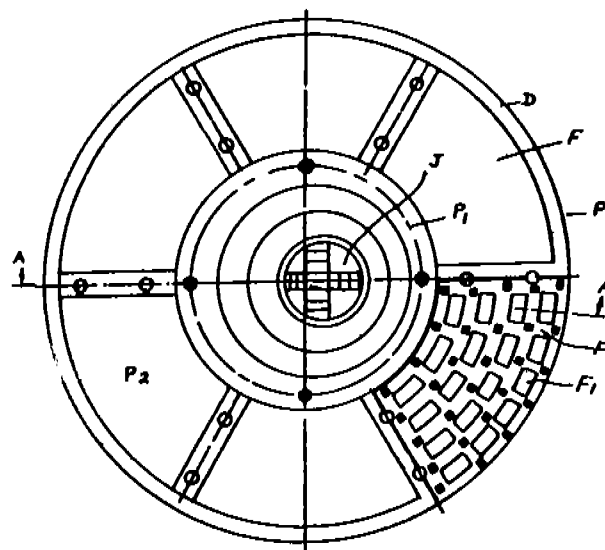


Fig. 1

Compl. specn. 8 pages.

Drg. 1 sheet.

Int. Cl.: C 07 B—57/00

166781

#### A PROCESS FOR OBTAINING INDIVIDUAL COMPONENTS FROM A RACEMIC MIXTURE THEREOF FOR EXAMPLE D-L-2 AMINO BUTANOL.

Applicant: ION EXCHANGE (INDIA) LTD., TIECICON HOUSE, DR. E. MOSES ROAD, MAHALAXMI, BOMBAY-400 011, MAHARASHTRA STATE, INDIA, AN INDIAN COMPANY.

Inventors : SHRINIVAS VINAYAK VAIDYA, (2) DR. VINOD CHINTAMANI MALSHE, (3) SHRIRODKAR SHANKAR SAVLARAM.

Application No. 208/Bom/1986 filed on 28-7-1986.

Complete after provisional left on 27th October, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay-13.

#### 7 Claims

A process for the recovery of individual components from racemic mixtures which comprises in reacting D-L-2-amino butanol with tartaric acid to obtain the respective esters of the D- and L-isomers, separating the D-2-amino butanol tartarate and the L-2-amino butanol tartarate in a known manner and thereafter subjecting the D-2-amino butanol tartarate and L-2-amino butanol tartarate to cation exchange operation characterized in passing through a strong acid cation exchange resin bed having the following characteristics:

Surface area of 20-25 M<sup>2</sup>/gm with water regain of 1.25 to 1.55 weight capacity 5.00 milliequivalent/gm, NaCl value of 1800-1900 milliequivalent/lit or a gel type with water regain 1.1 to 1.25 weight capacity 5.00 and known NaCl value of 1500-2000 milliequivalent/lit in wet condition, the tartaric acid and respective 2-amino butanol being split in said bed to give a service effluent of tartaric acid while the amino butanol is retained by the said bed which is recovered by passing a strong alkali such as ammonia or trimethyl amine through said bed.

Provl. specn. 5 pages.

Drgs. Nil.

Compl. specn. 8 pages.

Drgs. Nil.

Int. Cl. : B 22 F—3/12

166782

AN IMPROVED PROCESS FOR THE MANUFACTURE OF A COMPOSITE OF SILVER TINOXIDE, CONTAINING MOLYBDENUM TRIOXIDE AND/OR TUNGSTEN TRIOXIDE, ELECTRICAL CONTACT TIPS.

Applicants & Inventor: GANGADHAR SADASHIV TENDOLKAR, (2) KASHI PRASAD MODI, (3) NARAYAN PANKAJ NAIK, ALL INDIAN NATIONALS, MODISON METAL REFINERS, 33 NARIMAN BHAVAN, 227 NARIMAN POINT, BOMBAY-400 021, INDIA.

Application No. 13/Bom/88 filed on Jan. 25, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 1 Claim

A process for the manufacture of electrical contact tips of a composite of silver and tin oxide containing molybdenum trioxide and/or tungsten trioxide which is obtained as a homogeneous mixture of silver and tin oxide and small quantities of WO<sub>3</sub> and/or MoO<sub>3</sub> suitable for the manufacture of electrical contact tips by coprecipitation method which involves, simultaneous dissolution of high purity silver and tin in nitric acid, treating the same with sodium hydroxide to coprecipitate a mixture of silver and tin hydroxide under controlled temperature below 40°C and pH between 7.5 to 8.5, adding requisite quantities of MoO<sub>3</sub> and WO<sub>3</sub>, washing, drying and calcining between

500-1000°C and then grinding to microfine mixture, or simple mixing of high purity silver powder, high purity tin oxide powder, WO<sub>3</sub> powder, and/or MoO<sub>3</sub> powder and either of the powder mixtures so obtained is sintered at temperatures 900-970°C to form a billet with or without brazable silver layer on the billet which can be extruded without or with brazable Ag layer and/or rolled to give a strip which is further coined to make electrical contact tips of required size and shape.

Compl. Specn. 6 pages.

Drgs. Nil.

Ind. Cl. : 62D [XXII (1)]; 170D [XXIII] (4)

166783

Int. Cl. : C 11 D—9/00, 9/06; D 06 M 15/09.

A FABRIC TREATMENT COMPOSITION WITH FABRIC SOFTENING PROPERTIES.

Applicants: HINDUSTAN LEVER LTD., HINDUSTAN LEVER HOUSE, 165/166, BACKBAY RECLAMATION, BOMBAY-400 020, MAHARASHTRA, INDIA.

Inventor: FRANCIS GEOFFREY FOSTER.

Application No. 21/Bom/88 filed on Jan. 29, 1988.

U. K. convention priority date Jan 29, 1987, Oct 7, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 4 Claims

A fabric treatment composition with fabric softening properties comprising :

- (i) at least 10% by weight of a soap which is a salt of a C<sub>8</sub>—C<sub>22</sub> saturated or unsaturated fatty acid;
- (ii) from 0.1 to 3% by weight of a nonionic substituted cellulose ether derivative having an HLB (as herein defined) of between 3.1 and 3.8, and a gelpoint (as herein defined) of less than 58°C, provided that the derivative contains substantially no hydroxyalkyl groups containing 3 or more carbon atoms; and optionally one or more of
- (iii) up to 50% by weight of a non-soap detergent active material; and
- (iv) an additional fabric softening agent selected from cationic fabric softening agents, fatty amines, fabric softening slays and their derivatives and mixtures thereof;

the composition yielding a pH of more than 8.0 when added to water at a concentration of 1% by weight at 25°C.

Compl. specn. 25 pages.

Drgs. Nil.

Ind. Cl. : 129 J, B, G Gr [XXXV]

166784

Int. Cl. : B 21 B—1/00, b 21 C-1/00, 23/00.

A METHOD FOR MANUFACTURING TUBES, BARS AND STRIPS OF A NON-FERROUS METAL.

Applicant : OUTOKUMPU OY, A FINNISH JOINT-STOCK COMPANY OF TOOLONKATU 4, 00100 HELSINKI, FINLAND.

Inventor : MAURI VIHTORI RANTANEN.

Application : 63/Bom/1988 filed on Mar. 11, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Bombay Branch.

#### 15 Claims

A method for manufacturing tubes, bars and strips of a non-ferrous metal, characterised in that the billet or tube shell or solid billet which is made by continuous casting is cold rolled by planetary rolling so that the area reduction is at least 70% and due to this and the influence of resistance to the deformation, the temperature of the material rises upto the recrystallization range.

Compl. specn. 13 pages.

Drq. Nil.

Ind. Cl. : 57 D[LXIV], 76 C [LXIV]

166785

Int. Cl. : E 05 C—17/36

A SAFETY CHAIN FOR DOORS.

Applicant : EARL BIHARI PRIVATE LIMITED.

Inventor : NAGPAL GEOFFREY BIHARILAL.

Application No. : 76/Bom/1988 filed on 23-3-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Bombay-13.

#### 4 Claims

A safety chain for doors comprising a chain having a flat/round/any other shaped object, preferably at the middle and one end flexibly mounted on the rigid frame of the door and the free end being provided with an object such as ring; a bent plate, preferably bent to 90° adapted to be fixed on the door panel, the projecting end comprising a hole having a slot into which the said flat/round/any other shaped object is adapted to be inserted into, such that when the door is opened the said flat/round/any other shaped object itself gets displaced from the said hole and ultimately the object at the free end of the said chain prevent door panel from complete opening.

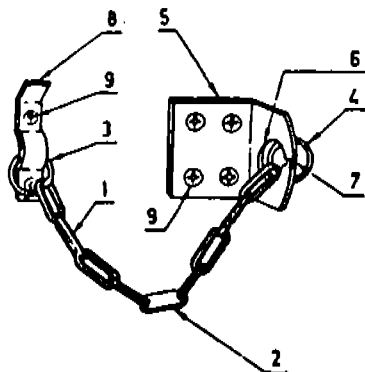


Fig. 1

Compl. Specn. 7 Pages.

Drq. 1 Sheet.

Ind. Cl. : 170B [XLII] (a)

166786

Int. Cl. : C11 D—3/02, 7/02

DETERGENT COMPOSITION FOR WASHING AND SOFTENING FABRICS.

Applicant & Inventor : HINDUSTAN LEVER LIMITED, HINDUSTAN LEVER HOUSE, 165/166 BACKBAY RECLAMATION, BOMBAY 400 020, MAHARASHTRA, INDIA.

Inventor : JOHN LLOYD.

Application No. 128/Bom/1988 filed on 12-5-1988.

U.K. convention priority date 14-5-1987.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Bombay.

#### 5 Claims

A detergent composition for washing and softening fabrics, comprising :

- (i) from 2% to 40% by weight of a detergent active system such as herein described.
- (ii) from 5% to 40% by weight of a builder material which comprises a water-soluble carbonate such as herein described and
- (iii) from 10% to 60% by weight of a water-insoluble calcium carbonate seed crystal characterized in that the composition further comprises :
- (iv) upto to 35% by weight of a fabric softening clay material such as herein described.

the weight ratio of the seed crystal to the clay material being less than 1.8 : 1.

Compl. Specn. 20 Pages

Drq. Nil.

Ind. Cl. : 189-LXVI(9)

166787

Int. Cl. : A 61K-7/40, 7/48, 31/045.

HUMECTANTS FOR SKIN TREATING COMPOSITION.

Applicant : HINDUSTAN LEVER LIMITED.

Inventors : (1) BRUCE J. NELSON. (2) GOSEPH D. MELNIK. (3) WILLIAM H. SCHMITT.

Application No. : 206/Bom/1988 filed on 26-7-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay.

#### 3 Claims

A humectant for a skin treating composition, comprising a synergistic combination of glycerol and diglycerol in a ratio by weight of from 90 : 10 to 10 : 90.

Comp. Specn. 13 Pages.

Drq. 1 Sheet.

Ind. Cl. : 13D [XL (1)]

166788

Int. Cl. : A 45C—3/02, 5/00

**A WATERPROOF MOULDED LUGGAGE.**

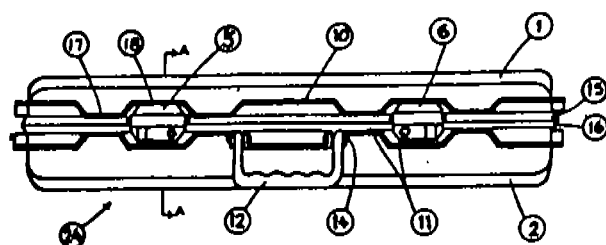
Applicant & Inventor: NIRMAL PANNALAL, C/O PANNALAL METAL INDUSTRIES, BADORA, BETUL, MADHYA PRADESH, INDIA.

Application No. : 209/Bom/88 filed on Jul. 26, 1988.

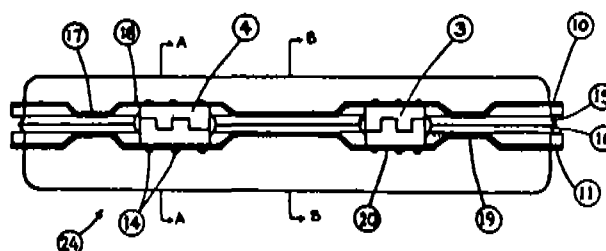
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

**5 Claims**

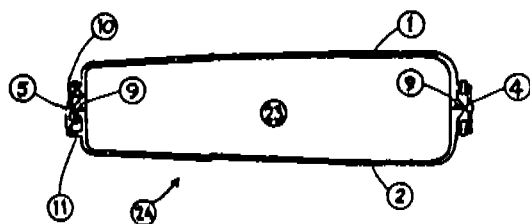
A waterproof moulded luggage comprising moulded paired rectangular hollow shells hinge-jointed along one edge, opposite edge provided with locking means and lifting handle characterised in that a pair of matching continuous grooves at faces of either borders of said paired hollow shells formed at moulding thereof provide a groove for receiving and pressing elastomeric gasket means there between, spaced to said borders of said hollow shells formed at moulding thereof are outwardly projecting reinforcing ribs along periphery of said hollow shells, said reinforcing ribs providing bases for securing thereto said locking means, said hinges and said lifting handle and also serve to increase rigidity of said borders of said paired hollow shells.



Figure—1



Figure—2



Figure—3

Comp. Specn. 5 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 35B XXV(2)

166789

Int. Cl. : C 04 B—7/00, 7/24

**A PROCESS FOR THE MANUFACTURE OF HYDRAULIC SETTING CEMENT FROM GOLD ORE TAILINGS SANDS ECONOMICALLY.**

Applicants: TATA RESEARCH DEVELOPMENT AND DESIGN CENTRE OF 1, MANGALDAS ROAD, PUNE-411 001, MAHARASHTRA, INDIA, A DIVISION OF TATA CONSULTANCY SERVICE, WHICH IN TURN IS A DIVISION OF TATA SONS LTD. AN INDIAN COMPANY AND PROF. PRAKASH CHAND KAPUR, CONSULTANT, DR. PRADIP & DHARMARAJAN VAIDYANATHAN, ALL THE THREE INDIAN NATIONALS AND OF TATA RESEARCH DEVELOPMENT AND DESIGN CENTRE, AFORESAID.

Inventors: PROF. PRAKASH CHAND KAPUR, (2) DR. PRADIP & (3) DHARMARAJAN VAIDYANATHAN.

Application No. : 231/Bom/1988 filed on 17-8-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

**9 Claims**

A process for the manufacture of hydraulic setting cement from gold ore tailings sands, economically, said process comprises :

- (i) mixing and dry or wet grinding gold ore tailings sands and at least one calcium bearing material such as herein described into a fineness of at least 2000 cm<sup>2</sup>/g. Blaine surface Area and further mixing and resulting fines and at least one clinkering aid such as herein described with water, to form a raw material mixture, the proportions of said tailings sands, calcium bearing material and clinkering aid being selected such that in the clinker mass the computed percentage by weight ratio of SiO<sub>2</sub> to Al<sub>2</sub>O<sub>3</sub> is 1—8, and that the computed percentage weight ratio of Al<sub>2</sub>O<sub>3</sub> to Fe<sub>2</sub>O<sub>3</sub> is 0.1—4 and that the computed percentage by weight ratio of calcium oxide to SiO<sub>2</sub>+Al<sub>2</sub>O<sub>3</sub>+Fe<sub>2</sub>O<sub>3</sub> (lime index) is 1.5 to 2.2 and that the computed percentage by weight of MgO is 1 to 10% and that the raw materials mixture contains 6—12% by weight of the clinkering aid,
- (ii) shaping and drying the raw materials mixture, if required;
- (iii) clinkering the raw materials mixture in a furnace at 1000 to 1350°C to form a clinker mass;
- (iv) cooling the clinker mass to ambient temperature; and
- (v) grinding the clinker mass to a fineness of at least 3000 cm<sup>2</sup>/g Blaine Surface Area.

Compl. Specn. 16 Pages.

Drg. Nil.

Ind. : 150B ; 125 [XLI (8)];  
125 B4; 156 F [XLVII (3)]

166790

Int. Cl. : F 16 L-27/08.

**A LEAK PROOF SWIVEL PIPE OR HOSE JOINT PARTICULARLY FOR USE IN A PETROL PUMP.**

Applicant & Inventor : PRADEEP VASANT GARUDE, C-39, PURNIMA DARSHAN, 90 FEET ROAD, MULUND (EAST), BOMBAY-400 081 MAHARASHTRA, INDIA.

Application No. 261/Bom/88 filed on Sept. 9, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay.

### 3 Claims

A leak-proof swivel pipe or hose joint particularly for use in a petrol pump to connect both the ends of hose to a petrol pump and nozzle, respectively, said swivel joint consisting of an inner tube and outer tube, said inner tube consisting of a head and a circular outer diameter portion, said inner tube further consisting of a stepped inner diameter, the wide part of said inner diameter of said inner tube being provided with taper threading, the step defined between the wide part of said inner diameter of said inner tube and the narrow part of said inner diameter of said inner tube being tapered, said outer tube consisting of a head and an outer diameter portion provided with taper threading, said outer tube further consisting of an inner surface profile corresponding to the outer diameter portion of said inner tube, said outer tube being mounted on said outer diameter portion of said inner tube in close contact therewith such that said inner tube and outer tube are rotatable relatively with respect to each other, the outer end of the head of said outer tube being in close contact with the inner end of the head of said inner tube, the edge of said inner tube extending beyond the edge of said outer tube and said outer tube being mounted on said outer diameter portion of said inner tube using a circlip located in a circumferential groove provided on said inner tube at the edge thereof, the edge of said outer tube abutting said circlip, said swivel joint including sealing means consisting of a ring or gasket located in a circumferential recess formed between a pair of spaced apart flanges provided on said outer diameter portion of said inner tube, said flanges and ring or gasket being in close contact with the inner surface of said outer tube.

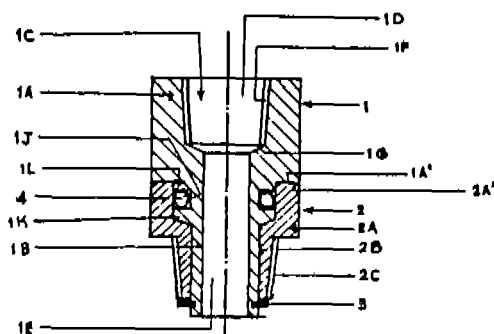


Fig. 1

Compl. Specn. 10 Pages.

Drgs. 3 Sheets.

### REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. No. 161615. Canfeill Pty. Ltd. of C Post Marwick Hungerford, 1st floor, Barclays House, 15, Short Street, South-

port, Queensland 4350, Australia. "Support Sheet". Priority date 22nd May, 1989 (Aus.)

Class 1. No. 161867. Parsottam Industries, 6, Bhaktinagar Station Plot, Rajkot-360002, Gujarat, India, a proprietary concern. "Gas Lighter". February 6, 1990.

Class 2. No. 161852. Khurana Brothers (P) Ltd., 31B, Prehlad Market, Karol Bagh, New Delhi-110005, an Indian Company. "Book Register". January 30, 1990.

Class 3. No. 161771. Taparia Tools Limited, Indian Company, 20, Shaheed Bhagat Singh Road, Fort, Bombay-400023, Maharashtra, India. "Screw Driver". January 8, 1990.

Class 3. No. 161819. Aakriti Plastic Products Pvt. Ltd., 16/1022 (First floor), Main Arya Samaj Road, Karol Bagh, New Delhi-110005, India, a Private Limited Co. "Car Clock". January 23, 1990.

Class 3. No. 161853. JIL Plastic, a Unit of Jagatjit Industries Limited, 9th floor, Ashoka Estate, 24, Barakhamba Road, New Delhi-110001, India, an Indian Company. "Jar". January 30, 1990.

Class 3. No. 161861. V.I.P. Industries Ltd., 78/A, MIDC Estate Satpur, Nasik-422007, Maharashtra, India. "Television Cabinet". February 5, 1990.

Class 3. No. 161933. Sachanner Marketing CC, 10, Beattie Street, Newlands Extension, Johannesburg, Transvaal Province, Republic of South Africa. "Clothes Peg". March 13, 1990.

Class 3. No. 161938. Emaons Industries, 11, Main Market, Subhash Nagar, New Delhi, India, an Indian Partnership Firm. "Knob for water tap". March 15, 1990.

Class 3. No. 161947. Ratnakar Ganesh Patwardhan, Indian National, R.P. Products, 55, Hindu Colony, Dadar, Bombay-400014, Maharashtra, India. "Coupling". March 19, 1990.

Class 3. No. 161957. M.H. Plastic Works, 797-Bartan Market, Sadar Bazar, Delhi-110006, India, Indian Sole Proprietary Firm. "Toy". March 20, 1990.

Class 3. No. 161964. Loren Beautifiers Pvt. Ltd., Indian Company of Nazrul Islam Avenue, Telgharia, P.O. Hatlira, Calcutta-700059, W.B., India. "Cap for Bottle". March 21, 1990.

Class 4. No. 161659. McDowell & Co., 3 Second Line Beach, Madras-600001, Tamil Nadu, India. "Bottle". November 29, 1989.

Class 12. No. 161814. Riche rich Products, A-18, Ram House, Middle Circular, Connaught Place, New Delhi-110001, India, Indian Sole Proprietary Concern. "Toy". January 23, 1990.

R. A. ACHARYA

Controller General of Patents,  
Designs and Trade Marks.



